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ABSTRACT

The annotated bibliography on competency-based teacher education was compiled as part of an effort to prepare guidelines for the Division of Vocational Education at the University of Georgia. The bibliography consists of 298 annotations and an updated section of 33 additional entries annotating publications received after the original document was completed. Each annotation lists the author, title, publisher, and a brief description of the document. Also cited are the ED numbers if the publication is available from ERIC. (BP)

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COMPETENCY BASED VOCATIONAL TEACHER EDUCATION

AN ANNOTATED BIBLIOGRAPHY

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COMPETENCY BASED VOCATIONAL TEACHER EDUCATION

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DECEMBER 1974

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PURPOSE OF THE CENTER

The Vocational Education Materials Center functions within the Division of Vocational Education, University of Georgia. This Center operates under grants from the U. S. Office of Education, and the Georgia State Department of Education with the support of the College of Education. The Center is comprehensive in its commitment and approach to the development and dissemination of materials in the broad field of Career and Vocational Education.

The Purpose of the Center is to increase the capability of Georgia's delivery system for Career and Vocational Education. Specifically, the Center is committed to:

1. Develop materials to assist in the implementation of proposed curricula and to enhance the teaching of Career and Vocational Education.

2. Conduct and report curriculum research related to Career and Vocational Education.

3. Provide a production and dissemination center for Career and Vocational Education materials.

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Preface

This annotated bibliography on competency based teacher education was compiled by the staff and research assistants of the Division of Vocational Education, University of Georgia, who were studying competency based teacher education in our effort to prepare guidelines for the Division. It is published in the hope that it will aid other researchers, teacher educators, state department personnel, and other change agents in assessing the current state of publications in the field of competency based teacher education. An update section has been added to the bibliography annotating publications received after the original document was compiled.

This is a selective bibliography. Hundreds of publications were read, but only those believed by the staff to be relevant were included.

The Division of Vocational Education is indebted to the staff and research assistants who annotated the bibliography on their own time.

Harmon R. Fowler
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Annotated Bibliography

Academy Theatre, Atlanta, GA: Atlanta Public Schools, GA: Clark College, Atlanta, GA. Commitment, Creativity, Challenge: We Are All Learning Together in the Process. Bethesda, MD: ERIC Document Reproduction Service, ED 065 479, 1972.

This document describes a competency-based teacher education program for students interested in the performing arts and other disciplines. The program enabled ten students to take classes at the theater and at the college and to work during afternoons as Urban Corps Interns in supervised classes in elementary schools. Evaluation of the program indicated that "the competence of any teacher in any discipline for any age level can be greatly increased by an awareness of the use of dramatic technique."

Adelson, Marvin. Professional Competence Core: An Interdisciplinary Curriculum for Undergraduates -- Evaluation Package. Final Report. Bethesda, MD: ERIC Document Reproduction Service, ED 072 764, 1972.

This evaluative report describes the creative, problem-solving curriculum for undergraduates at UCLA. The program is designed for those students whose aims are action-oriented and who intend to enter graduate-professional training. The program is designed to help students obtain competencies as decision makers and effectuators. Some of the key components of the report include the program objectives, a model of the curriculum and explanation of its implementation, behavioral objectives for the instructional program, and evaluation information.

Alkin, Marvin C. and Klein, Stephen P. Accountability Defined: Evaluating Teachers for Outcome Accountability. Bethesda, MD: ERIC Document Reproduction Service, ED 068 495, 1972.

The two part report discusses traditional and exemplary methods of evaluating teacher effectiveness and education program accountability. Part I describes three types of educational accountability; goal, program and outcome, and outlines three exemplary accountability schemes. Part II suggests that traditional teacher evaluation methods are not adequate, indicating that the principal's judgments are usually too subjective, while standardized tests of pupil performance do not relate to the program's objectives. Student performance on relevant measures is recommended as the primary basis for a teacher evaluation system. Two potentially effective systems of teacher evaluation are discussed in detail.

Allen, David. "Performance Goals in Technical Education: The Instructional Level Concept." American Vocational Journal, 48 (April, 1973), 64-5.

This article states that performance goals must be based on occupational analysis consisting of three steps: a task inventory, review of the task inventory findings, and the establishment of instructional tasks and levels. It is recommended that an advisory committee be utilized to determine baseline data for establishing instructional levels. Three levels of instruction are presented for performance goals: (1) level one is concerned with the student's ability to follow directions, (2) level two is concerned with the student's ability to call up information previously learned, and (3) level three prepares the student to face a new problem. An outline identifying the three levels of instruction is included for clarification.

Allen, Dwight W. and Mackin, Robert A. "Toward a Redefinition of Teacher Education." Educational Technology, 10 (February, 1970), 65-70.

In this article the authors condemn the present teacher education system for "quietly muddling along, unchanged and unaware" of the massive technological and social changes of the past decade in American society. Several reasons for the need for restructuring the teacher education field and several suggestions for accomplishing the task are given. The prediction is made that unless the educators recognize the need for change and begin implementing the change process, it will be forced upon them by persons outside the field. The performance-based Model Elementary Teacher Education Program funded by the U.S. Office of Education is cited as an example of increasing federal influence in promoting change.

Alschuler, Alfred S. and Ivey, Allen. "The Human Side of Competency-Based Education." Educational Technology, 12 (November, 1972), 53-55.

The article states that research points out a lack of any relationship between grades and life success. The authors are concerned that instructional objectives be created that define relevant human competence. The authors stress the importance of a psychological education for the student in order for him to have a more satisfying adult life.

Andrews, Theodore E. "Atlanta or Atlantis? PBTE and State Implementation." Journal of Teacher Education, 24 (Fall, 1973), 232-7.

The author discusses the various approaches used by different states toward implementing performance-based teacher education programs, and compares the approaches to "travelers" -- some well aware of their destinations and others not so sure. The author implies that some states are totally committed to PBTE while other states have totally rejected it. Problems relating to structure and individuality are discussed.

Andrews, Theodore E. "Certification Issues in Competency-Based Teacher Education." Educational Technology, 12 (November, 1972), 43-5.

This article briefly discusses the issues surrounding competency-based teacher certification. A distinction is made between the two, often confused, terms of certification issues and teacher education issues. The author concludes that certification issues revolve around the state's authorization to certify (license) professional personnel employed in the public schools and that teacher education questions involve problems about how to prepare a person to be qualified to obtain the certificate (license). Competency-based certification is defined as certification where "specific objective criteria are used as standards of measure." A general discussion of the national movement toward certification based on competency performance is given.

Andrews, Theodore E. Manchester Interview: Competency-Based Teacher Education Certification. Bethesda, MD: ERIC Document Reproduction Service, ED 063 275, 1972.

The fictitious dialogue between three educators in the year 1980 reviews the present course and future alternatives of competency-based teacher education and certification. Teaching centers located regionally within the state are the only sources of teacher training. In these centers all teachers are part of the clinical approach to the preparation of teachers. Key topics discussed in the interview include (1) competency-based teacher education, (2) teaching centers, (3) moving teacher education out of universities and colleges, (4) staff requirements for CBTE programs, (5) new roles for state departments of education, (6) mechanics of a proposed competency-based teacher education program, and (7) problems of the new program and intended results.

Andreyka, Robert E. and Shirley, Del. Foundations for Vocational Teacher Education Curricula. Bethesda, MD: ERIC Document Reproduction Service, ED 070 871, 1972.

This paper reviews the background research for, and discusses the developmental foundations of, the performance-based teacher education project at the Center for Vocational and Technical Education at Ohio State University. A general discussion of Phase I and Phase II is given.

Annual Southern Regional Research Conference in Agricultural Education Proceedings. (21st Mississippi State University, July 25-27, 1972). Bethesda, MD: ERIC Document Reproduction Service, ED 072 294, 1972.

This document reports on the proceedings of a 3-day meeting of the Southern Regional Research Conference in Agricultural Education devoted to research implications of performance-based teacher education. Some of the presentation titles include the following: (1) "Utilizing Agricultural Industry in Determing Performance Objectives," (2) "Performance-Based Teacher in Perspecti[illegible]," (3) "Implications of a Core Curriculum for Agriculture on Pe[illegible]formance-Based Teacher Education," and (4) "Implementing Performance-Based Teacher Education Programs."

Atwood, June C. "Performance Goals in Home Economics: Learning Comes Out In the Open." American Vocational Journal, 48 (April, 1973), 55-6.

This article describes the identification of, and writing of, performance goals in child care services, one area of Home Economics Education. The author maintains that performance goals must be based on analysis that reveals the skills needed, the equipment to be operated, and the tools and materials to be used. She points out that the most valid source for information upon which to base performance goals is direct observation of people in an occupation. A format for writing performance goals is suggested and the sharing of these goals with students is encouraged. A prototype in the performance element to "assist teacher with a nursery school activity" is included.

Aubertine, Horace E. The Evolution of Performance-Based Teacher Education Programs. Bethesda, MD: ERIC Document Reproduction Service, ED 079 274, 1973.

This paper presents a discussion of a systematic approach to educational theory and practice as it applies to PBTE. Approximation models, as used in physical science, are discussed and an analogy for a teacher education model having set, pacing, and closure as its main components is developed. It is claimed that this model will increase the probability of a greater number of "positive teachable moments." A generation of PBTE since the early 1960's is given. The author also emphasizes the importance of formative evaluation procedures within a program.

Bailey, Gerald Douglass. The C/PBTE Module Laboratory: Creating, Storing, and Utilizing Competency/Performance-Based Units of Instruction. Bethesda, MD: ERIC Document Reproduction Service, ED 081 719, 1972.

This is a paper presented to the Association of Teacher Educators. Bailey emphasizes the importance of physical facilities for a C/PBTE program. According to the author, substructures needed in a C/PBTE Module Laboratory include: (1) Competency/Module Catalogue Index, (2) Creation Center/Module Bank, (3) Videotaping Station, (4) Videotape Playback Station, (5) Independent Study Carrels, (6) Multiple Activity Room, (7) Work Tables, (8) Pre-Post Assessment Station, and (9) Planning and Counseling Station.

Banks, Jane M. "Measuring the Immeasurables: Performance Goals for the Affective Domain." American Vocational Journal, 48 (April, 1973), 36-7.

The author outlines the need for performance goals in the affective domain and suggests several resources that would be useful in writing them. Some sample affective performance goals are given. A list of action verbs for affective objectives is given and two (instructor's opinion or observation) rating scales are presented to show how attainment of an affective objective can be evaluated.

Benedict, Paul L. A Process for Becoming a Teacher. Bethesda, MD: ERIC Document Reproduction Service, ED 079 239, 1973.

This paper provides a description of a secondary teacher education program based on four assumptions: a) learning is accomplished through the individual; b) learning is a personal concern; c) learning occurs through exploration and experimentation; and d) learning is a blend of experiences, hopes and ideas. The program focuses on: (1) the development of the participant in relation to his own society's purposes in secondary education; (2) the participant as a teacher and human being; (3) his relationship with his students; (4) the nature of the learning process; and (5) the nature and content of his major field of study. Mechanics of the program are explained. The program was by RHAM High School and the Secondary Education Department at Eastern Connecticut State College.

Best, Gilmary. Validating Performance Models for Re-educating Certified Urban Teachers in Multicultural Dimensions. Final Report. Bethesda, MD: ERIC Document Reproduction Service, ED 072 162, 1972.

This study describes performance models for teacher education programs for retraining experienced teachers in multicultural urban societies. The models developed were based upon (1) the concept that colleges and instructors should adapt their progress to individual students; (2) critiques of the whole system of education given by multi-ethnic students, and (3) interviews with talented scholars having various racial and ethnic backgrounds. The following topics are discussed: 1. Language Aspects of Culture, 2. Motivational Patterns

Rooted in Culture, 3. Culture Impacted Learning Style, 4. Time Orientation, 5. Patterns of Family Relationships, 6. Cultural Sexual Aspects, 7. Folklore, and 8. Special Rites and Customs. Models were validated on the basis of applicability, implementability, and cultural acceptability.

Bezzi, Ruth and Bezzi, D. R. Initiating A Performance-Based Teacher Education Program. Bethesda, MD: ERIC Document Reproduction Service, ED 072 032, 1972.

In this document the authors propose a performance-based, field-centered, individualized and systematic elementary teacher education program. Modules are used as the primary mode of instruction. Modules are used as the primary mode of instruction. Modules were developed for the major components of the language arts program. The utilization of the field centered approach is discussed and the need for total involvement of educators at various levels is stressed.

Blau, Guitta and Fall, Charles. "Teacher Competency and the Profession." Paper prepared for State T.E.P.S. Commission, State University of New York at Buffalo, February, 1969. (Mimeographed).

This paper attempts to develop a concept of the teaching process that will fit the demands of education in modern times and suggests patterns of endeavor that professional organizations should undertake. Topics of interest included are: (a) dimensions of modern life having implications for educational change, (b) criteria upon which an educational program should be based, (c) implications for the development of concepts of teacher competency, (d) an analysis of present approaches to development of competency models of teaching, (e) a "competency constellation model," and (f) what a professional organization must be doing. The "competency constellation model", which emphasizes the domains of doing, being, and knowing, is illustrated. A bibliography is included.

Borg, Walter R. "Protocols: Competency-Based Teacher Education Modules." Educational Technology, 13 (October, 1973), 17-20.

This article describes the development, implementation and evaluation of six protocol modules, each dealing with an important concept related to teacher language by the Utah State University Protocol Project Staff. Protocol modules deal with concepts considered to be basic to teaching and help the learner to understand these concepts and relate them to classroom practice. According to the author, evaluation results indicate that students favor protocol modules and regard them as superior to conventional educational courses in terms of quality of the educational content, relevance and interest level.

Boyd, Dorothy L. "Competency-Based Teacher Education." Kappa Delta Pi RECORD, 9 (April, 1973), 120-1.

This article presents a brief overview of certain advantages of competency-based teacher education. The advantages identified are: (1) behavioral statements of course objectives provide students with a better understanding of the program as a whole and the expectations held for them; (2) the performance-based program is individualized and personalized; (3) college professors work cooperatively to analyze tasks and to order self-directed activities for students; (4) minimum criteria for students are defined; and (5) independent study module use is encouraged.

Bradley, Ruth; Kallenbach, Warren; Kinney, Lucien; Owens, Viola M.; and Washington, Eva. Measuring Teacher Competence: Research Backgrounds and Current Practicing. Bethesda, MD: ERIC Document Reproduction Service, ED 040 152, 1967.

In this document the authors discuss the problem of measuring teacher competence and demonstrate the need for a clear definition of the concept. A definition of teacher competence is provided which identifies six teacher roles on the basis of the group of individuals with whom the teacher works. An instruement developed at the University of Hawaii, using the California definition as a base, is discussed. An annotated bibliography is provided, as well as a detailed taxonomy of teacher roles derived from the California definition.

Breit, Frank and Butts, David P. A Comparison of the Effectiveness of An Inservice Program and A Preservice Program in Developing Certain Teaching Competencies. Bethesda, MD: ERIC Document Reproduction Service, ED 028 069, 1968.

This report describes an experimental study conducted with pre-service and in-service elementary teachers which was designed to effect their knowledge of the processes of science and change their instructional decision behavior. It was concluded that pre-service and in-service teachers who experience a similar instructional program show some similar changes and some contrasting behavior changes, particularly in the affective domain. In-service students showed a change in attitude toward the program itself while pre-service participants showed an attitude change toward concepts related to the methods of the new curriculum under study.

Broudy, Harry S. A Critique of Performance-Based Teacher Education. Bethesda, MD: ERIC Document Reproduction Service, ED 063 274, 1972.

This critique is concerned with three basic assumptions underlying a performance-based teacher education program. These assumptions

are: (1) that teaching is the sum of performances into which it is analyzed, (2) the number and character of the performance can vary according to the program, and (3) the criterion for the end product of teacher training is demonstrated competency in the training performances. Broudy refutes these basic assumptions and points out that PBTE will probably prepare persons capable of only didactic teaching. He recommends that alternative needs should be considered in producing teachers who can utilize theory to solve educational problems.

Brown, Jerry L. and Okey, James R. Identifying and Classifying Competencies for Performance-Based Teacher Training. Bethesda, MD: ERIC Document Reproduction Service, ED 076 565, 1973.

In this document the principle that competency-based teacher training programs should be based on performance objectives, sequenced according to the needs and interests of learners and according to instructional considerations, is used by the investigator as a basis for study. A classification system used to generate teaching competencies for teachers of varying levels of skill and experience is discussed. The results of a study involving pre- and in-service teachers, principals, superintendents, and teacher trainers is reported concerning their classification of a set of competencies according to the time they should be learned in a teacher's career.

Brown, Jerry L. and Okey, James R. "A Performance Approach to Teacher Education." Viewpoints, 49 (July, 1973), 53-61.

In this article the authors present their views of the advantages and disadvantages of PBTE. They discuss the selection and statement of performance outcomes. The authors state that evaluation should be done throughout the program so that the student may move on or recycle through the program. They maintain that a single form of assessment should not be used but forms should be varied depending upon the outcome(s) being assessed.

Burdin, Joel L. "Scenario on Teacher Centers in the 1990's." Journal of Teacher Education, 25 (Spring, 1974), 40-3.

This article presents a look into the future -- the 1990's -- with direct examination of the status of the educational process. An imaginative account of the profession is presented. "Professional Development Centers (PDC's)" are thoroughly, however imaginatively, described.

Burdin, Joel L. and Mathieson, Moira B. "A Review of the Research on Performance-Based Teacher Education." Educational Technology, 12 (November, 1972), 61-6.

This article pulls together and annotates 15 research studies concerning PBTE and "competency" that are recorded through ERIC and two annotated bibliographies. The author suggests that if the reader expands this bibliography he should use the descriptors -- teacher education, performance criteria, educational accountability, evaluation criteria, performance factors, and academic achievement. Instructions are given for using the ERIC descriptors.

Burdin, Joel L. and Reagan, Margaret, eds. Performance-Based Certification of School Personnel. Bethesda, MD: ERIC Document Reproduction Service, ED 049 152, 1971.

This document is a report of the proceedings of a 1970 Miami Beach Training Session for national leaders in teacher education to consider performance criteria in determining teaching ability and certification. The document is in three parts. Part I describes the concept of performance-based certification and why it is needed. Part II describes the plans and procedures for changing to performance-based education. Part III considers the impact that performance criteria will have on teacher certification.

Burke, Caseel. The Individualized, Competency-Based System of Teacher Education at Weber State College. Bethesda, MD: ERIC Document Reproduction Service, ED 063 276, 1972.

This document presents an overview of the background, change agents, structure and operation of the individualized performance-based teacher education at Weber State College. The structure and utilization of "WILKITS" is described. An evaluation of the program is included indicating a number of favorable outcomes. Several observations drawn from this report were that students were learning more, that there is a friendlier more cooperative student-faculty relationship, and both students and faculty are working harder. The program received the distinguished achievement award for 1971 from the AACTE.

Burke, J. Bruce; O'Neil, Julia; and Welsch, Kay. "A Humanized Model of a Computer Managed Instructional System." Educational Technology, 12 (November, 1972), 51-6.

This article states that educators see computer technology as a remedy to relieve budget pressures. Mastery modules should be individualized so that a student's record of achieved objectives would be exemplified by variety, thoroughness, and relevance. A crucial element in the use of computer is the prevention of the student feeling that he is being machine directed. Peers and a differentiated staff who work together are of utmost importance to the success of the system. The authors feel that as a result of a good computer instructional system the student will not be dehumanized but will exhibit freedom that comes with competency and autonomy.

Burns, Richard W. "Achievement Testing In Competency-Based Education." Educational Technology, 12 (November, 1972), 39-42.

This article examines the role achievement testing plays in competency or performance-based learning. One interesting hypothesis presented is that tests are as much, if not more, a measure of the instructional process or methods of learning as of information learned. Criterion Referenced Tests (CRT) and Norm Referenced Tests (NRT) are discussed and compared. One subject discussed at length is "what does testing measure." Wide-range achievement tests are advocated as effective predictors of past and future learning because they reflect the total instructional process.

Burns, Richard W. "Behavioral Objectives for Competency-Based Education." Educational Technology, 12 (November, 1972), 22-5.

This article states that it is the specifications of behaviors that give leverage to the competency-based movement. Burns defines a terminal behavioral objective (TBO) as "specific, expressed from the learner's point of view, and behaviorally oriented." He states that objectives are useful for (1) public record, (2) communicating to learner what he should be able to do, (3) helping to select appropriate instructional activities, and (4) helping select valid evaluation activities. The author indicates that while objectives are not the answer for all things they do have many values.

Burns, Richard W. and Kligstedt, Joe Lars. Competency-Based Education: An Introduction. Englewood Cliffs, NJ: Educational Technology Publications, 1973.

This book is composed of nineteen articles (by various authors) originally printed in the November, 1972, issue of Educational Technology Magazine. A few of the issues discussed concerning competency-based education (CBE) are: (a) philosophical basis for CBE, (b) psychological implications of CBE, (c) competency-based learning, (d) empathy competence, (e) behavioral objectives for CBE, (f) learning modules for CBE, (g) curriculum design, (h) achievement testing in CBE, (i) certification issues, (j) accreditation issues, (k) relating communications technology to CBE, (l) human side of CBE, (m) CBE and the open classroom, and (n) implications for urban children. There are other issues not listed here. A review of research on performance-based teacher education is included.

Byers, Edward E. "Accountability's Offspring." American Vocational Journal, 48 (April, 1973), 24-5.

This article summarizes what the author considers some of the ills of our present educational system and the demand for

accountability. Byers states that there is almost universal agreement that education must be made increasingly more relevant, more personalized and more reliable in respect to students' needs. A case is made for the establishment of performance goals and instructional systems as a means of improving education. A number of significant developments attributed to instructional systems and performance goals are suggested.

Byram, Claudia A. "Competency-Based Education: How Competent?" Educational Technology, 13 (October, 1973), 38-9.

This article describes (CBE) Competency-Based Education as a special kind of individualized system. The author states that one omission being made in many competency-based education models is the failure to include diagnostic processes. In CBE, the diagnosis could be carried out by the learner, the advisor, or both. It is suggested that diagnostic instruments could be built into the system to provide feedback information regarding success or failure to reach prescribed level of mastery and the reasons why.

Cady, Lillian V. and Allen, Wendell C. "Preparing Teachers To Meet Change: One State's Approach." Educational Technology, 10 (February, 1970), 71-2.

This article expresses the authors' concern that education and educational personnel have not been in step with our changing society. Contemporary society requires new approaches to teacher preparation as well as additional objectives. Four ideas on teacher preparation which emerged from the Washington State Teacher Education Advisory Committee are presented. These ideas appear to have potential for constructive and positive changes in teacher education and increase the probability that teachers will be better prepared to meet the challenges of change in our society. A description of Washington State's new standards of school personnel is included.

Canfield, Albert A., ed. Competencies for Allied Health Instructors. Bethesda, MD: ERIC Document Reproduction Service, ED 074 258, 1972.

This document describes a project conducted which resulted in the development of a structure of competencies related to effective faculty performance in the field of allied health. The report includes (1) statements of general program goals; (2) competency area definitions; and (3) competency statements for the areas of instruction, curriculum development and planning, education, administration and supervision, research community health concepts, and speciality theory and skills.

Carruth, James W. "North Carolina Moves Toward Competency-Based Media Preparation Programs." Audiovisual Instruction, 18 (May, 1973), 33-4.

This article describes the requirement for certification of media personnel in North Carolina beginning in 1972. Sixty-four competencies were identified and confirmed for the undergraduate (basic) level and at the graduate (advanced) level.

Carstens, James C. "Performance Goals on Faculty Evaluation: Steal This Tool." American Vocational Association, 48 (April, 1973), 77-9.

This article suggests that the performance goal is an important component of faculty evaluation. A sample faculty evaluation performance goal patterned after the model presented in Writing Performance Goals: Strategy and Prototype, developed by the Center for Vocational and Technical Education, is described. It is suggested that the performance goal used in faculty evaluation moves us one step closer toward accountability.

Case Study of Performance-Based Field Oriented Education at the University of Washington, 1967-72. Bethesda, MD: ERIC Document Reproduction Service, ED 075 420, 1972.

This report contains the detailed results of a 4-year program leading to the development of performance-based field-oriented teacher education at the University of Washington. The historical development of the present program is described from its origin of several programs. Analysis of program design over the past four years resulted in a planning design that is based on a conceptual and a management domain. Four basic approaches are being implemented: (1) the development and field testing of a systems model based on learning modules designed to prepare interns for elementary schools in the inner city; (2) the development of a progression of teaching tasks in a system design for a continuous field experience for a two year period; (3) the development and field testing of performance objectives, tasks, and practice; and (4) continuation of the field testing of a management model based on a coalition of university, school district, professional association and student representatives. Appendices contain information on program standards, reports, formats, and performance criteria rating scales.

Chase, Shirley A.; Finch, Curtis R.; and Speiss, Jeffrey M. Validation of Teacher Education Curricula. Bethesda, MD: ERIC Document Reproduction Service, ED 070 869, 1972.

This paper describes the developmental efforts being conducted at the Center for Vocational and Technical Education to produce performance-oriented modules of instruction that can be used

by teacher educators to prepare vocational teachers and coordinators. Project constraints, including time limit, money available personnel resources, and the environment in which the modules were developed and tested, are presented. A discussion of validation procedures is included. Validation procedures include establishing content validity, face validity and construct validity.

Clark, Christopher. "Now That You Have a Teacher Center, What Are You Going to Put into It?" Journal of Teacher Education, 25 (Spring, 1974), 46-8.

This article reports on a project of the Program on Teacher Effectiveness at the Sanford Center for Research and Development in Teaching (SCRDT). Teacher training products were identified and descriptions were placed in computer information storage.

Clark, Frances E. and Hamilton, James B. Cooperative Development of Vocational Teacher Education Modules. Bethesda, MD: ERIC Document Reproduction Service, ED 070 870, 1972.

This article describes the development of vocational teacher education modules by the teams involved in the "Cooperative Development of Professional Education Curricula Project" sponsored by the Center for Vocational and Technical Education. A detailed discussion of the components of a module, including title page, introduction, performance objectives, resource materials, module supplement, and their development is included.

Clark, Paul A.; Gee, Charles; and Lindeman, Robert. Development of a Performance-Based Teacher Education Curriculum Final Report. Bethesda, MD: ERIC Document Reproduction Service, ED 079 203, 1973.

This is a project report of Mulligan College PBTE and gives the rationale for and the development of their program. Curriculums used for secondary and elementary teachers are given. Included is an evaluation of the program.

Clegg, Ambrose A. and Ochoa, Anna. Evaluation of a Performance-Based Program in Teacher Education: Recommendations for Implementation. Bethesda, MD: ERIC Document Reproduction Service, ED 057 017, 1970.

This report describes an experimental model for a performance-based elementary teacher education program. Background data, model characteristics, and step-by-step development of the model are described in detail. The staff of the model field-based program identified and trained cooperating teachers in three

types of schools -- urban, suburban, and intercity. A pass-fail system of grading was implemented. Detailed recommendations for program improvement are included as well as lists of sample performance objectives and evaluative criteria.

Collins, James F. "The Making of a Teaching Center." Journal of Teacher Education, 25 (Spring, 1974), 13-20.

This author discusses certain identified considerations for persons contemplating the development of a teaching center. The issues identified and discussed are: (1) purpose and function; (2) clientele; (3) program; (4) financing; and (5) governance. Examples, under each of these topics or issues, are presented. Seven "case studies" of teaching centers in operation in the United States are presented, including descriptions of the location, clientele, program, etc. of the centers.

Competency-Based Professional Education in Home Economics: Selected Competencies and Criteria. Washington, DC: American Home Economics Association, 1974.

This publication was developed in a national workshop held in February, 1974. The rationale, background of, and a model for implementation are given. The competencies and criteria are given for preprofessional education and for professional improvement (post-baccalaureate).

Cook, Fred S.; Neuhauser, Charlotte L.; and Richey, Rita C. A Working Model of: A Competency-Based Teacher Education System. Detroit, Michigan: Wayne State University, Department of Vocational and Applied Arts Education, 1972.

This booklet describes a systems approach to teacher education which utilizes the tenets of competency-based instruction developed and implemented at Wayne State University. The following are discussed in some detail: (1) background data on the VAE Systems; (2) the instructional system consisting of 75 pre-certification competencies with 264 performance objectives, needs assessment, delivery system and evaluation; and (3) management information system consisting of seven subsystems -- admissions, class scheduling, faculty load, instruction management, intern teaching and follow-up subsystem. Models for two VAE [illegible] included.

Cook, Fred S. and Richey, Rita C. Two VAE Systems Models: A Model for a Competency-Based Instructional System: The VAE Accountability Model. Competency-Based Teacher Education Series No. 2. Gaithersburg, MD: ERIC Document Reproduction Service, ED 076 746, 1972.

This is the first of a series of booklets which describe the competency-based teacher education program developed by the vocational and applied arts education staff at Wayne State. Key facets of the program presented are instructional systems and accountability. The booklet is divided into two parts. Part I presents the model of the program. This includes system elements such as competencies, performance objectives, needs assessment, delivery systems, and evaluation. Part II presents an accountability model designed to facilitate the implementation of an instructional system.

Cook, Gordon M. Why Competency-Based Teacher Education? Bethesda, MD: ERIC Document Reproduction Service, ED 074 030, 1973.

This paper reviews the competency-based teacher education movement (CBTE). Key topics discussed include the definition of CBTE, basic elements and characteristics of CBTE including individualized instruction, personalization of instruction, student involvement, effective management systems and a field-based approach. Several criticisms of CBTE are presented in addition to a rationale for moving to CBTE.

Cooper, James M. A Guide to Model Elementary Teacher Education Program. Bethesda, MD: ERIC Document Reproduction Service, ED 035 603, 1969.

This document describes the model elementary teacher education program at the University of Massachusetts. The program is an attempt to institutionalize change through thorough analysis of educational roles, tasks, structure and objectives. The model was designed, organized, and managed according to systems analysis and emphasizes such concepts as differentiated staffing, variable entry and exit points, and commitment to continuous education. The model program was one of nine such models funded by the U.S. Office of Education.

Cooper, James M. A Performance Curriculum for Teacher Education. Bethesda, MD: ERIC Document Reproduction Service, ED 030 590, 1967.

This speech emphasizes the need for teacher educators to identify the specific skills needed for effective teaching and design them into a performance-based instructional program of teacher preparation. Several advantages of a performance-based teacher education program are mentioned. Outlines of Stanford University's general and foreign language performance curriculums and of the criteria for two particular skills are included.

Cooper, James M.; Jones, Howard L.; and Weber, Wilford A. "Specifying Teacher Competencies." Journal of Teacher Education, 24 (Spring, 1973), 17-23.

The authors discuss four major issues related to specifying teacher competencies: (1) the bases (philosophical, empirical, and practitioner); (2) the kinds of competencies (knowledge, performance and consequence); (3) the personnel involved; and (4) the processes used in specifying the competencies. The prediction is made that difficulties can be overcome "by careful planning and effective communication among all involved."

Conroy, William G., Jr. "The Synthesized Behavioral Objective." Educational Technology, 13 (October, 1973), 29-32.

This article states that there is little systematic use of behavioral objectives in American education. Four possible reasons for this state of affairs are given. The article describes a minor development in the form of specifying synthesized behavioral objectives which might play a role in making behavioral objectives easier to use. The synthesized behavioral objective (SYNOB) is a record or form for communicating a variety of alternatives, within a specified behavioral objective. An example of a SYNOB is included. The use of the SYNOB in instructional management and evaluation is described. Advantages of SYNOB's are also described.

Cosman, Myron N. "Testing the Occupational Competency of T & I Teachers." American Vocational Journal, 48 (January, 1973), 25-7.

This article describes the Vocational Occupational Competency Testing Program as an introductory rationale for competency testing on a national level. Occupational competency examinations are designed to test the level of skill and technical knowledge of the candidate in his particular occupational field. Five uses are described for occupational competency examination data. The results of the pilot phase for this national project are also reported.

Cotrell, Calvin J.; Bennett, James G.; Cameron, Walter A.; Chase, Shirley A.; Molnar, Marilyn J.; Wilson, Roger J. Model Curricula for Vocational and Technical Teacher Education: Report No. 1. Performance Requirements for Teachers. Final Report. Bethesda, MD: ERIC Document Reproduction Service, ED 059 355, 1971.

This document describes the first phase of a project initiated to develop, demonstrate, and test curricula for the preparation and in-service education of vocational and technical teachers. In this phase 237 performance elements were identified by using the analysis technique, and common, mixed, and unique elements were identified by a task force representing seven vocational service areas. An additional 30 performance elements were identified and 147 performance elements were verified through a national critical incident study. Performance oriented general objectives were written for 226 of the performance elements. A major conclusion was that a large body of common performance

elements exist for all vocational service areas.

Cotrell, Calvin J.; Chase, Shirley A.; and Molnar, Marilyn J. Model Curricula for Vocational and Technical Teacher Education: Report No. IV. A Foundation for Performance-Based Instruction, Final Report. Bethesda, MD: ERIC Document Reproduction Service, ED 067 509, 1972.

This document describes 390 performance requirements to be used as guidelines in the development of performance-based core curriculums for in-school laboratory teachers and cooperative secondary program teacher-coordinators in vocational and technical education. These performance requirements are analyzed and classified into a three part system. Sample performance-based educational objectives are provided as guides for vocational teachers to develop specific required performance objectives for their respective situations. Included is a summary report of the proceeding of the 4th national teacher education seminar which provided feedback information on the project.

Cotrell, Calvin J. "Innovative Programs in Teacher Education." Summary of a presentation to the staff workshop of the Bureau of Vocational and Technical Education, Pennsylvania Department of Education at Carlisle, Pennsylvania, 14 December, 1972.

This paper presents an overview of the establishment of a pilot effort in performance-based vocational teacher education in Pennsylvania. A 21 item list of the features of performance-based vocational teacher education (PBVTE) is given. Also, a discussion of the in-service teacher education program being planned at Temple University and the pre-service program contemplated for the Eastern Region of Pennsylvania is given.

Cotrell, Calvin J.; Chase, Shirley A.; Molnar, Marilyn J. Model Curricula for Vocational and Technical Teacher Education: Report No. 5 General Objectives, Set II. Bethesda, MD: ERIC Document Reproduction Service, ED 069 845, 1972.

This document presents performance-oriented general objectives for use in writing specific objectives for vocational and technical teacher education curriculum. These objectives are classified by major functions required of teachers and teacher coordinators. The last chapter discusses ways to use the general objectives. The functions are: (1) Program Planning, Development, and Evaluation; (2) Planning of Instruction; (3) Execution of Instruction; (4) Evaluation of Instruction; (5) Management; (6) Guidance; (7) School-Community Relations; (8) Student Vocational Organization; and (9) Coordination. A total of 384 teacher competencies are identified.

Counselor Education: A Program in Functional Humanism. Bethesda, MD: ERIC Document Reproduction Service, ED 075 422, 1972.

This document describes a performance-based program of counselor education with special emphasis on counselor selection, training, and evaluation. The counselor education program is humanistic and is based on seven basic assumptions. Two of these key assumptions are that: (1) the goal of counselor education is growth rather than learning, and (2) the program focuses upon the person as an organic entity rather than as a receptacle for learning. Included in the appendices are course formats containing course objectives, methods of instruction, evaluation techniques, and test materials.

Cox, Richard C. "Confusion Between Norm-Referenced and Criterion-Referenced Measurement." Phi Delta Kappan, 55 (January, 1974), 310.

This article points out that many of the traditional measurement principles have been developed for norm-referenced measurement and are probably not applicable to criterion-referenced measurement. Methods of establishing reliability and validity for both types of tests are discussed.

Crawford, Lucy C. A Philosophy of Distributive Education, A Report of the First Step in the Research Project "A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education." Bethesda, MD: ERIC Document Reproduction Service, ED 019 412, 1967.

A report on a research project to initially establish a philosophy of distributive education consistent with the philosophy of vocational education, the goals of secondary education and the ideals of American democracy. Contained in the 110 page report is a description of the research procedures, findings, a bibliography, statistical data, the profile inquiry form and a list of the agreed upon "beliefs."

Crawford, Lucy C. A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education. Final Report. Volume I. Bethesda, MD: ERIC Document Reproduction Service, ED 032 393, 1967.

This is the first of five reports describing a comprehensive curriculum development project of national scope involving a number of distributive education state supervisors, teacher coordinators, teacher education personnel, and distributive workers at entry, supervisory, and management levels. Key objectives of the project were to determine (1) the basic beliefs

concerning distributive education, (2) critical tasks of the distributive education teacher coordinators, (3) professional competencies needed to perform these tasks, and (4) technical competencies needed by the teacher coordinator to develop worker competencies. This volume includes a philosophy of distributive education, critical tasks of the high school distributive education teacher coordinator, the professional and technical competencies needed, and a cross tabulation of competencies needed by selected distributive workers.

Crawford, Lucy C. A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education. Final Report. Volume II. Bethesda, MD: ERIC Document Reproduction Service, ED 032 304, 1967.

This report contains the critical tasks, competencies needed to perform the tasks, and a cross tabulation of competencies needed by workers in selected categories of department and variety stores. This volume is part of a comprehensive five-part project of national scope, involving many distributive education state supervisors, teacher coordinators, and teacher education personnel.

Crawford, Lucy C. A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education. Final Report. Volume III. Bethesda, MD: ERIC Document Reproduction Service, ED 032 305, 1967.

This report includes the critical tasks, competencies needed to perform the tasks, and a cross tabulation of competencies needed by workers in selected categories of food stores, service stations, and wholesaling. This is volume III of a five-part work of national scope involving many distributive education state supervisors, teacher coordinators, and teacher education personnel.

Crawford, Lucy C. A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education. Final Report. Volume IV. Bethesda, MD: ERIC Document Reproduction Service, ED 032 306, 1967.

This document contains the critical tasks, competencies needed to perform the tasks and a cross tabulation of competencies needed by workers in selected categories for the areas of hotel/motel and restaurants. This volume is part of a comprehensive study of national scope involving many distributive education state supervisors, teacher education personnel, and teacher coordinators.

Crocker, W. A. "Ten Commandments for a PBTE Developer." Phi Delta Kappan, 55 (January, 1974), 34.

The author of this brief article lists his "ten commandments" in a competency-based educational program developer. The commandments reflect the ten most common mistakes made in CBTE planning.

Crosby, J. Michael. "A Teacher Looks at Teaching Centers and Educational Reform." Journal of Teacher Education, 25 (Spring, 1974), 31-6.

This article emphasized the need for several things to be done in the educational system. These were: (a) re-examine the role of the schools and determine what they can and cannot do; (b) greatly increase the resources available to the educational process; (c) make staff development programs much more relevant to the most pressing problems of schools; and (d) place the teacher and student "center stage" in the development, installation, and evaluation of educational programs. Some elaboration on the last two items is given. Nine (item) recommendations are given for "building better centers" and for educational personnel program development. Two extracts from a task force report are presented to provide a "profession-wide" teachers' view of teaching centers.

Grove, Martin H. and Reader, Gary F. "Experimental Learning in Competency-Based Teacher Education Programs." Paper presented at the Competency Based Teacher Education Conference, Wayne State University, Detroit, Michigan, May, 1974. (Mimeographed).

This paper suggests that in a competency-based teacher education program, the area of interpersonal relations must be emphasized. Individual professors can begin to alleviate this problem by adopting an experimental mode of learning in their classrooms. Experimental learning is another form of simulation and involves various forms of role playing. All of the activities require (1) a stimulus event or object, which (2) provokes or promotes interaction between people and the event or object, (3) a path-way(s) of communication among persons involved, and (4) resolution, or final pulling together of experiences and their relation to present material or school-related problems. Two sources are given for obtaining more information about experimental learning.

Gyphert, Frederick R. and Gant, Walter L. "The Delphi Technique: A Tool for Collecting Opinions in Teacher Education." Journal of Teacher Education, 21 (Fall, 1970), 417-25.

This is a research-oriented article that discusses the "Delphi Technique" for collecting opinions and arriving at consensus. Authors of the article explain the need for scientifically assessing the needs, desires, and opinions of educational clientele and interested persons outside of education for educational improvement. The Delphi Technique replaces the round-table discussion method of arriving at consensus. It is a carefully designed program of sequential interrogations, interspersed

with information and opinion feedback. An example survey conducted at the University of Virginia is outlined with detailed explanation of the procedure and results.

Daniel, Fred K. Performance-Based Teacher Certification: What Is It and Why Do We Need It? Bethesda, MD: ERIC Document Reproduction Service, ED 045 551, 1970.

This document defines the concept of performance-based certification and describes why we need it. The Florida approach for moving toward performance-based teacher certification is outlined. Two activities designed to encourage movement to performance-based certification include (1) development of broad teacher education guidelines for use in program design and development and (2) a plan for designing and disseminating performance-based modules for use in ongoing preservice and inservice programs.

Darcy, Michael C. "Three Stages in the Development of CBTE." Phi Delta Kappan, 55 (January, 1974), 325-7.

This article comments on three older articles on competency-based teacher education that appeared in the Kappan. The author presents the view that each of these three articles represent a developmental phase of a CBTE program. The three phases are: (1) a main phase of the listing and specifying of the job competencies, (2) the phase when one feels pressure for statistically significant results, and (3) the phase when one isolates problems and attempts to develop processes, and not products, to solve recurrent problems. Descriptions of the three phases are included with examples of each.

Dorsey, Natalie T., ed. A Performance-Based Undergraduate Program for the Education of Teachers at Brooklyn College. Volume I. Bethesda, MD: ERIC Document Reproduction Service, ED 076 513, 1971.

This document presents an overview of a performance-based undergraduate program for the education of teachers at Brooklyn College. The introduction includes an overview, assumptions, goals, specific features, and desired outcomes. The second section of the report describes four course-level sequences of the program: early childhood, elementary, middle schools, and secondary. A 42 item bibliography is included. Volume II contains, in a separate document, the appendices which are position papers on various aspects of the program.

DeVault, M. Vere. "Teacher Centers: An International Concept." Journal of Teacher Education, 25 (Spring, 1974), 37-9.

This article presents a comparison of teaching centers in the United States, Britain, and Japan. Teaching centers have been created to foster curriculum development and inservice education. The British centers function by and for teachers on a voluntary basis. The Japanese centers have resulted from informal study circles and are involved in practical work.

Dodl, Norman R. "Selecting Competency Outcomes for Teacher Education." Journal of Teacher Education, 24 (Fall, 1973), 194-9.

This article stresses the need for all who are concerned with teacher education programs to become involved in selecting competencies according to teacher roles and in having the competencies adequately validated within the preparation context. The article pursues three interrelated themes. They are: (1) "competencies are related to teaching functions by examining the language complexities inherent in the definition of competency by providing examples and a summary description of the several bases for deriving competencies"; (2) "the competency selection process must be considered primarily as a political process and secondarily as a research-based scholar's choice"; and (3) "several major competency selection issues and problems are examined."

Doolittle, Lawrence W. "Harold's Report on the Lock Haven Experience: A CBE Adventure." Phi Delta Kappan, 55 (January, 1974), 327-9.

This article describes the proceedings of a competency-based education workshop as reported by a hypothetical individual named Harold. A key topic discussed is the group process of writing "Initial Interim Inventory of Generic Competencies" required for teachers. The author states that a reformed teacher under this program would be made up of five systems: attributes, cognitions, skills-psychomotor, skills-cognitive, and skills-affective.

Dropkin, Stan. "Twin Dimensions of Teacher Behavior Assessment." Contemporary Education, 44 (January, 1973), 142-6.

This article presents a discussion of two dimensions of teacher behavior, effectiveness and competence. Effectiveness is defined as "producing the intended or expected result." Effectiveness behaviors are linked to the achievement of specific, agreed-upon learner behaviors. Competence is defined as "having suitable or sufficient skills, knowledge, experience, etc.; for some purpose; properly qualified." The competency dimension includes all teacher behaviors viewed in terms of a particular set of performance criteria theoretically or empirically developed. A detailed discussion of these two dimensions is presented. Both approaches to teacher-behavior assessment have implications for teacher-training program.

Drumheller, Sidney J., ed. "Competency-Based Instructional Systems and the Human Facilitators: Confessions of a Module Writer." Educational Technology, 13 (April, 1973), 9-14.

This article identifies many of the weaknesses in the movement to contrive and implement individualized instructional systems in education. Components of an instructional system which are most vulnerable include: materials, management system, designers, publishers, and learners. The article is divided into three

parts: (1) an overview of the components of an instructional system; (2) an overview of human decisions made during the life cycle of an instructional system which bear on its longevity; and (3) a discussion of the instructional system as a viable instructional medium for the 1970's.

Drummond, William H. "The Meaning and Application of Performance Criteria in Staff Development." Phi Delta Kappan, 52 (September, 1970), 32-5.

This article presents the view that systems technology, applied humanely, will promote fundamental changes needed for modern education and staff development for our schools. Key topics discussed include: (1) a statement of beliefs and values concerning the application of technology to education, (2) a set of principles for program development, (3) institutional considerations in the use of performance criteria, (4) individual considerations in the application of performance criteria for staff development, and (5) a summary of the changes in teacher education which logically follow from ideas presented.

DuBey, Robert E.; Endly, Virginia L.; Roe, Betty D.; Tollett, Daniel J. A Performance-Based Guide to Student Teaching. Danvill, Illinois: The Interstate Printers & Publishers, Inc., 1972.

This book is designed to provide the student teacher, the supervising teacher, and the university supervisor with a planned guide for the professional growth of the student teacher. Included in the book are performance objectives for student teaching, suggested activities, methods for assessing the student teachers' progress toward stated objectives and evaluation devices for recording progress.

Dziuban, Charles D. and Esler, William K. "Structuring a Performance-Based Teacher Education Program in Science." Science Education, 57 (April - June, 1973), 161-7.

The authors of this article explain performance-based teacher education in terms of three ingredients: performance objectives, alternate paths for learning, and performance evaluation. Performance objectives are classified into five types: (1) knowledge, (2) performance, (3) affective, (4) experience, and (5) consequence. Alternate paths for learning are described for each type of objective in terms of conditions of learning. Evaluations for each type of performance-objective are also described. An abbreviated performance-based preparation program for science teachers is outlined with examples for meeting each type of objective.

Eastman, Leo E.; Pierce, Walter; and Seller, William. "Guidelines for Transition from Traditional to Competency-Based Teacher Education." (Mimeographed).

This manuscript identifies nine guidelines relevant to the transition from traditional to competency-based teacher education. These guidelines are derived from experiences at Illinois State in preservice secondary teacher education after six years in a CBTE program. The guidelines are offered so that those anticipating a change to a self-paced competency-based program will be aware of certain possible problems from the outset of their program development. The nine guidelines are: (1) There is no such thing as instant change, (2) Build the new competency-based program on the strengths of existing program, (3) Decide early whether your competency-based program will follow a self-paced instructional systems approach or if you will place students in a classroom setting, (4) If a systems approach is used, prepare staff and students through inservice work and orientation sessions for the new roles to which they must adapt, (5) Implementation of a systems approach implies a form of differentiated staffing which must be accommodated, (6) Accommodation must be made within the university system, for evaluation of staff involved in the competency-based system, (7) University administration staff and services must be involved early where appropriate, (8) A self-paced competency-based program using a systems approach will need special record-keeping devices, and (9) Decide who will be coordinator of the total program. A six item bibliography is included.

Eddy, Manik S. "Professional Improvements in Basic Mechanical Instructional Competencies." The Agricultural Education Magazine, 44 (January, 1972), 179-80.

This article deals with the impact of Public Law 90576 on teachers of vocational agriculture. This mandate to offer vocational education to persons of all ages in any location was accepted as a challenge by the Alabama Vocational Agricultural Educational program. As a first step, a survey was made of 271 teachers of vocational agriculture to ascertain a measure of their perceived instructional competency to teach high school students in each of six occupational clusters. An analysis of this survey made possible the planning of a series of in-service workshops and graduate credit courses. During the third year of the program 98% of all regularly employed teachers had participated in these activities. These courses are to be offered on a regular basis until a majority of the teachers reach optimum competency level.

Edwards, Clifford H. "Competency-Based Teacher Education: A Critique." Contemporary Education, 44 (January, 1973), 188-91.

This article summarizes some of the criticisms and problems which can be generalized to include all competency-based instruction.

Some major criticisms are: (1) competencies do not meet the expectations of logical criteria, (2) competencies are all too frequently measured by inappropriate means, (3) it is impossible to specify and measure all the competencies required for effective teachers, (4) students often cannot progress through a program at their own rate because of lack of materials or supporting services, (5) there is a tendency among competency programs to have short-circuited channels for feedback and change. Practical problems usually encountered in competency-based programs include: (1) students experience difficulty in adjusting to a self-imposed schedule, (2) students experience difficulty in adjusting to the change of evaluation and grading from a norm-referenced model to a criterion-referenced model, (3) instructors sometimes react irrationally to a high rate of student failure, (4) student inability to gain proficiency from experiences outside the traditional classroom, and (5) mediated materials have a relatively low interest level. Other problems fundamental to competency programs are also discussed.

Edwards, Clifford H. "Technology in a Proficiency-Based Teacher Education Program." Educational Technology, 13 (April, 1973), 62.

The author of this article describes a new professional educational sequence taken by secondary education teacher candidates at Illinois State University which is competency-based. Each competency is the subject of a complete learning package. Students receive instruction and assistance from a team of professors. A number of technological supporting systems are described, including the utilization of random access information retrieval system, a testing center, a computerized surveillance system, and a unique evaluation component.

[illegible], Iris M. Performance-Based Teacher Education Programs: A Comparative Description. Bethesda, MD: ERIC Document Reproduction Service, ED 067 590, 1972.

This report document presents a general view of the results of implementation of performance-based teacher education programs. Part I presents an overview of PBTE and a brief description of selected PBTE Institutions. The overview topics include introductory information, basic approaches to implementation, and an analytic framework. The description of PBTE Institutions include observations and recommendations. Part II presents a detailed description of specific PBTE programs emphasizing conceptualization, selection, support, control, organization, linkage, instruction, management, and cybernation. A bibliography and glossary are included.

Elam, Stanley. Performance-Based Teacher Education. What is the State of the Art? Bethesda, MD: ERIC Document Reproduction Service, ED 053 165, 1971.

This document presents the concepts of performance-based teacher

education, examines its potential, and identifies problems and questions. Five essential elements are identified: (1) teaching competencies to be demonstrated are role derived, specified in performance terms, and made public; (2) assessment criteria are competency-based, specify mastery levels and are made public; (3) assessment requires performance as prime evidence and takes student knowledge into account; (4) student progress depends on demonstrated competencies; and (5) the instructional program facilitates development and evaluation of specific competencies. Characteristics and advantages of performance-based programs are also described.

Ellis, Elmer C. "Elementary Curriculum Design for the Future." Educational Technology, 12 (November, 1972), 36-7.

This article is concerned with competency-based elementary curriculum. The author sees a need for defining and specifying the job that needs to be done. He states that before change in teaching methods takes place, the teacher must become dissatisfied with his present teaching. He expects the future of elementary curriculum to be modularized instruction and an absence of the old textbook methods. As a result, there will be effective persons in the future who are adaptable, flexible, and know how to learn.

Hutton, Kenneth A. Competency-Based Education Development Project, Final Report. Bethesda, MD: ERIC Document Reproduction Service, ED 065 463, 1971.

This report describes a project conducted at Western Kentucky University. It was concerned with ascertaining the effectiveness of the Teacher Corps program in developing and implementing competency based teacher education in a teacher training program designed to prepare middle school teachers. Key purposes of the project were to: (1) serve as a data-collection agency for a national project, (2) assist the Teacher Corps faculty in developing competency-based instruction, and (3) monitor the effectiveness of the competency-based instruction provided by the teacher education faculty. Evaluation methods and results are presented indicating that interns favored a competency-based teacher education program. Appendices devoted to measuring instruments, definition of CBTE, and Teacher Corps guidelines and CBTE are included.

Experimental Model for Teacher Education. Bethesda, MD: ERIC Document Reproduction Service, ED 074 066, 1970.

This document describes an experimental model for teacher education at the University of Washington. The model is designed to serve as a training laboratory for experienced teachers, predoctoral and post-doctoral students, which will encourage them to assume leadership roles when they return to their home institutions.

Emphases of the project include: (1) performance criteria, (2) field-based programs, (3) improved relationship between educational theory and classroom practice, and (4) more intensive classroom experience. Charts describing the organization of the project and the teaching competency model are presented, along with tasks and criteria for classroom management.

The Experimental Teacher Education Program, Case Study. Bethesda, MD: ERIC Document Service, ED 074 062, 1972.

This study grew out of a high school project which was a cooperative effort between the University of Northern Colorado and the Denver Public Schools. Three major areas in teacher preparation were modified as a result of this study: (1) general education, (2) student teaching, and (3) methods courses. The general education requirements emphasized an interdisciplinary action; the student teaching program took students into the field their freshman and sophomore years; and the methods courses were replaced by a "Professional Year" in which students prepared instructional portfolios in their major fields, which were used to show prospective employers instead of the traditional college transcripts.

Fagan, Stanley A. and Checkon, Stephen. Issues in Measuring Teacher Competence for Affective Education. Bethesda, MD: ERIC Document Reproduction Service, ED 065 554, 1972.

This article discusses measurement for affective education within inservice teacher education. The three main approaches to affective education are seen as: (1) facilitation of emotional insight and understanding; (2) facilitation of emotional experience; (3) facilitation of emotion-modifying actions. Measurement is considered in relation to three dimensions for the assessment of competency (knowledge, skills, and attitude). Identification is made of technical and process issues.

Dalton, W. A. "Research on Teacher Evaluation." National Elementary Principal, 43, (November, 1963), 19-27.

This article mentions several reviews and summaries on teacher effectiveness which stress the importance of the Handbook of Research on Teaching. The question about teacher effectiveness is whether to assume it is to be an attribute of the teacher in a particular teaching situation or whether to assume it is to be considered about the results that come out of a teaching situation. Most studies have been made on the former assumption. The traits or combination of traits which are closely associated with teacher competence have been the subject of several studies. Dr. Dalton compares all these traits with success based on other research studies. In most of the studies of unsuccessful teachers, it has been found that poor maintenance of discipline and lack of

cooperation tend to be the chief causes of failure. Health, educational background, preparation, age and knowledge of subject matter, appear to be unimportant factors in terms of failure. Ryan's study of teacher characteristics is perhaps the most extensive. This was based on more than one hundred separate research projects conducted in about 1700 schools involving 6000 teachers.

A Feasibility Study for a Comprehensive Competency-Based Training and Certification System for Child Care Personnel in the Commonwealth of Pennsylvania. Bethesda, MD: ERIC Document Reproduction Service, ED 072 014, 1972.

This is an annotated bibliography containing 196 items dealing with components of a competency-based training and certification system for teachers serving children in day care programs in Pennsylvania. Articles are arranged under the following organizational topics: job content data; task analysis; definition of competencies, behavioral objectives; staffing patterns; assessment instruments and procedures; certification and licensing; individualized learning modules; training designs; curriculum development; field-based training, internships; training techniques; child care program descriptions; and other bibliographic sources.

Ferguson, Edward T. Emerging Teacher Education Curricular Models. Leadership Training Series No. 33. Bethesda, MD: ERIC Document Reproduction Service, ED 047 162, 1971.

This is a report of the proceedings of the Fourth Annual National Vocational-Technical Teacher Education seminar held in November of 1970. Contains presentations of over 20 national leaders in teacher education and some findings of a 3-year research project at "The Center" on performance-based model curriculums and core concepts for organizing and providing professional offerings. This seminar had three objectives: (1) to provide an understanding of the performance-based core concept of a model Vo-Tech teacher education curriculum, (2) to focus on an understanding of the administrator's role in implementing such a curriculum, and (3) to foster an understanding of the teacher educator's role in improving the curriculum.

Finch, Curtis R. and Hamilton, James B. "Performance-Based Teacher Educational Curricular: Implications for Programs." Paper presented at the Seventh Annual National Vocational and Technical Teacher Education Seminar, Dallas, Texas, 22-25 (October, 1973). (Mimeographed).

This paper deals with a number of key concerns about PBTE implementation. These include the characteristics of such a program and the issues involved in its implementation. A great deal of emphasis is being placed by PBTE on the identification, attainment and assessment of teaching competencies. Comparing PBTE with a

traditional program shows: (1) PBTE's focus on explicit teacher competencies as opposed to general statements of achievement, (2) the difference between the two in terms of basic characteristics such as explication of competencies to be attained, assessment criteria and procedures, student orientation, and instructional intent. These differences are what make PBTE both an exciting and controversial movement.

Flanders, Ned A. "Basic Teaching Skills Derived from a Model of Speaking and Listening." The Journal of Teacher Education, 24 (Spring, 1973), 24-37.

This article begins with a "simple model of conversation," which is then embellished and used to identify particular kinds of speaking-listening transitions. These transitions suggest basic teaching skills associated with speaking and listening. Four phases of activities are presented in a model of the critical steps of listening. In all of these phases, the teacher is quite self-conscious about maintaining a balance between the completed events and the anticipation of things to come. The teacher can establish flexible patterns of intervention skills and develop the courage, patience and convictions necessary to use intervention wisely.

Flanders, Ned A. "The Changing Base of Performance-Based Teaching." Phi Delta Kappan, 55 (January, 1974), 312-15.

This article is concerned with the changes expected to occur during the next decade or two in performance-based teaching. Three problem areas in which considerable change can be expected deal with (1) measuring educational outcomes, (2) analyzing the interactive patterns of teaching and (3) learning and inventing more effective training procedures. Supposing that progress in these three areas could surpass the expectations of their being solved, the goals of PBTE would have to be changed or new priorities established. Dr. Flanders is concerned with the flexibility and adaptability of the current or proposed PBTE programs. Do they contain built-in modifications? Do they contain procedures for selecting which old ideas will be discarded in favor of new ideas that will come along? Do they have the mechanisms to explore alternative teacher training methods for learning the same skills? The answers to these questions should be obtained in order to assure that PBTE programs can be effective now and in the future.

Florida Vocational And Adult Teacher Education Guidelines. State of Florida. Department of Education. Division of Vocational, Technical and Adult Education.

This pamphlet contains guidelines listing common competencies needed by all vocational education students. Following the identified and consolidated list of common competencies is

appended the specialized competencies required for employment or further training in the respective vocational education program fields. The specialized program fields discussed are as follows: Adult General, Agricultural, Business and Office Occupations, Distributive, Diversified Cooperative, Health Occupations, Home Economics, Industrial Arts, Industrial and Technical Educations.

Fraenkel, Jack R. Evaluatiion of National Center for Educational Research and Development/Teacher Corps Competency-Based Education Development Project. Bethesda, MD: ERIC Document Reproduction Service, ED 065 487, 1972.

This report describes a one-year effort to incorporate some aspects of CBE into the course work of the teacher-training interns involved in the program at San Francisco State College. In a three hours-per-week course, a number of changes from the traditional method of teacher-training were initiated. The most noticeable was the formation of cluster-development teams, consisting of students and staff. These teams worked to develop modules and clusters and to collect, store and organize the material necessary for the implementation of these modules.

Fritschel, Arthur L. "Minimum Standards for Teacher Competence." Illinois Education, 55 (April, 1967), 347-8.

This article points out that there are no generally agreed upon minimum standards and that there will likely never be any agreement. One fact is outstanding, however--the changing role of the teacher. Based on this fact, Dr. Fristchel points out four possible areas of minimum competency: (1) the teacher's role is fundamentally that of a director of learning, (2) the teacher should develop skills in human relations in order to meet the changing needs of our society-oriented programs, (3) the teacher should become an agent for change (these changes should be observed in student behavior as well as in society), and (4) the teacher must develop professional competency in order to carry out the other three areas.

Fibel, Lewis R. Review and Synthesis of Literature on Occupational Preparation in the Community College. Bethesda, MD: ERIC Document Reproduction Service, ED 061 416, 1972.

This is an examination of the role of community colleges in occupational education in terms of methods of operation and extent of offering. Included is information on entrance requirements, curriculum, administration, and methods of instruction in these community colleges. Recommendations are made for needed additional research. An extensive bibliography is included.

Gay, Lorraine R. and Daniel, K. Fred. "Accreditation and Performance-Based Teacher Education." Educational Technology, 12 (November, 1972), 45-50.

In the article, a distinction is made between state accreditation and state certification. Three levels of accreditation (national, regional, state) are discussed. Also discussed are three types of standards used in the evaluation of teacher education programs: input, process, and product standards; and various problems and issues in competency-based accreditation.

Gazzetta, Vincent C. New York State Certification by Competency. Bethesda, MD: ERIC Document Reproduction Service, ED 074 511, 1972.

This paper discusses teacher certification in New York State and how it may be improved. Proposed is a competency-based, field-centered program to be established which states the required competencies, provides for their assessment, establishes performance standards, and allows for their modification. Also, suggested are three major changes in teacher certification policy and procedure: (1) each preparatory program will evaluate individuals' credentials instead of the Division of Teacher Education and Certification, (2) a teacher with a provisional certificate should complete a masters degree or 30 semester hours of graduate study within 5 years, (3) periodic assessment of newly certified teachers should be made.

Getz, Howard; Kennedy, Larry; Pierce, Walter; Edwards, Cliff; and Chesebro, Pat. "From Traditional to Competency-Based Teacher Education." Phi Delta Kappan, 54 (January, 1973), 300-2.

This article describes how Illinois State University has replaced its traditional eight semesters of teacher training with self-paced instructional packages. Desired teaching behaviors are specified in these packages, and a demonstration of proficiency is needed for each competency before credit is given. Difficulties have arisen in scheduling and administering a series of continuous instructional sessions, maintaining and operating the microteaching stations, supervising the testing centers, maintaining a surveillance system to keep track of 1,976 students engaged in some 80 separate packages and supervising the maintenance of the library materials. All in all, ISU is pleased with the results of their new system, but have found the adjustment by staff and students to be slower and more agonizing than they had expected.

Giles, Frederic T. and Foster, Clifford D. Changing Teacher Education in a Large Urban University. Bethesda, MD: ERIC Document Reproduction Service, ED 064 254, 1972.

This document presents a discussion of the implementation of a PBTE program at the University of Washington. Initial emphasis is on the conditions and processes necessary to bring about a

change in teacher education. The second section describes specific PBTE programs at the University, with emphasis on the conceptual and management domains of program development in teacher education.

Glenn, Ronald E. and True, Robert J. "Converting Craftsmanship into Learnable Units." American Vocational Journal, 48 (April, 1973), 40-2.

This article contends that although trade and industrial teachers usually have strong backgrounds in the world of work and know how to practice their particular trade, they still lack the ability to reduce types of jobs to discrete operations that are teachable and can be practiced in an educational situation. In short, they have difficulty in writing clear, concise, and understandable performance goals that will guide and direct the student's learning experience. The authors offer encouragement by stating that ". . . writing performance goals is a technique that you can master by following a few simple steps and practicing the concepts developed."

Goldbas, Mervyn; Wheeler, Daniel; Hull, Ronald E.; and Bauman, Daniel. Teacher Performance: Do We Know What We Are Evaluating? Bethesda, MD: ERIC Document Reproduction Service, ED 074 064, 1973.

This article discusses a study designed to provide teacher trainers at State University College, Fredonia, New York, with information concerning: (1) actual criteria by which student teachers were being evaluated, and (2) an alternate process that would more validly measure the degree to which objectives in the field experience program were obtained. Student Teacher Evaluation forms of elementary education graduates were analyzed in terms of their relationship to marks, recommendations, and job success. It was found that the Student Teacher Evaluation forms had little external or internal validity.

Graham, Leah and Donahue, Larry. "CBTE Program: Field Component Development Process." Paper presented at American Educational Research Association, April 29, 1974. (Mimeographed).

This paper describes a cooperative CBTE project between Michigan State University and Lansing School District. Release time was given to Lansing teachers to work with university personnel in an effort to improve the performance of teachers. The paper describes the problems that were encountered and gives an evaluation of the project.

Grieve, Mary Jane. "Utilizing Performance-Based Modules in Teacher Education Programs." Paper presented at the Seventh Annual National Vocational and Technical Teacher Education Seminar, Hotel Adolphus, Dallas, Texas, October 22-5, 1973. (Mimeographed).

This article discusses the general use of performance-based

modules in teacher education programs. Some limitations and benefits of the rise of and administration of self-paced materials are offered. It describes the advantages of the learning resource center at Oregon State University.

Hafiz, M. Sharrif. Developing a Competency-Based Elementary Teacher Education Program at Norfolk State College Based on the Implications -- Study of the Comprehensive Elementary Teacher Education Models. Final Report. Vol. I. Bethesda, MD: ERIC Document Reproduction Service, ED 065 489, 1972.

This report reviews the conclusion of a series of activities, procedures, and conferences conducted by faculty at Norfolk State College for the study of the Comprehensive Elementary Teacher Education Models (CETEMS). Five major procedures are identified and discussed as being used in the process of studying the programs.

Halamandaris, P. G. and Loughton, A. John. "Empathy Competence: A Search for New Direction in Canadian Teacher Education." Educational Technology, 12 (November, 1972), 20-2.

This article discusses the use of observational techniques to identify the aspect of "empathy competence" teaching performance. Empathy competence was defined as "the ability of a teacher to genuinely consider, as a first priority, the rights, feelings and achievements of the individual student, in all teaching activities." It is suggested that Canadian teacher education programs in the 1970's should show more interest in both empathy competence and skill competence. One suggested way of achieving such competence is through a program of community involvement. The article refers to the IMPACTE program at Brandon University.

Halfin, Harold H. and Courtney, E. Wayne. Competencies of Vocational Teacher -- The Identification of the Common Professional Training Requirements of Vocational Education Teachers. A study sponsored by the Board of Regents of Wisconsin State Universities, May, 1970.

This study reports that the University of Wisconsin attempted to identify common training needs of secondary teachers in vocational education. Instruments containing 130 items were sent to 150 teachers in ten states, and items were factor analyzed. Commonalities tended to verify that several elements could logically be offered in a common training effort. A 42 item bibliography is given, and the instrument used is included in the appendix.

Hamachek, Don. "Characteristics of Good Teachers and Implications for Teacher Education." Phi Delta Kappan, 50 (February, 1969), 341-5.

This article points out that research has come up with four areas of teacher personality and behavior that can be related to teacher effectiveness: (1) personal characteristics, (2) instructional procedures and interaction styles, (3) perceptions of self, and (4) others. After listing the characteristics of good teachers based on several studies, the author suggests that teacher education include sensitivity training.

Harbeck, Mary B. "The Student Will Appreciate Competently. . ." Educational Technology, 12 (November, 1972), 26-8.

This article discusses the difficult role in developing attitudes, interests and appreciations in competency-based learning. Suggestions are offered for developing instruments for testing behaviors in the Affective Domain.

Harsh, J. Richard. A Look at Teacher Evaluation. Bethesda, MD: ERIC Document Reproduction Service, ED 046 993, 1970.

This article discusses the positive and negative factors which exist in teacher evaluation. Various factors, processes, tenets, and characteristics of effective evaluation are discussed. Performance criteria and behavioral objectives are seen as positive aspects of evaluation. Teacher-student and teacher-administrator interactions are emphasized in a set of guidelines presented as a model for future evaluation.

Henderson, Judith E. and Lanier, Perry E. "What Teachers Need to Know and Teach (for Survival on the Planet)." Journal of Teacher Education, 24 (Spring, 1973), 4-16.

This article discusses three major questions: (1) What is teaching? (2) What is effective teaching? (3) What knowledge, skills and competencies does a teacher need to teach effectively? After defining teaching, "when the intended changes selected by the teacher are both desirable and constructive for the learner(s), and the intended changes are actualized as a result of instruction," the article deals with how man's relation to his environment calls for his utilizing certain skills, one of which is problem solving. The authors present a model which attempts to describe the total systems of teaching (givens, ends, means and results of teaching).

Herr, Edwin L.; Horan, John J.; and Baker, Stanley B. "Clarifying the Counseling Mystique." American Vocational Journal, 48 (April, 1973), 66-8.

This article emphasizes the role of vocational guidance. By employing "systematic counseling" vocational counselors can better perform their two major tasks of promoting adaptive behavior and

eliminating maladaptive behavior. The characteristics of a well-stated vocational counseling goal are the same as a well-written instructional performance goal. These characteristics are: (1) identification of the terminal performance goal by name, (2) description of the important conditions under which the behavior will be expected to occur, and (3) specifying the criterion of acceptable performance. The authors conclude their article with the statement that vocational guidance is a subsystem of career education, and vocational counseling is a subsystem of vocational guidance; therefore, performance-based goals in these two subsystems will contribute to the establishment of accountability in career education.

Hill, E. Joy. "Old Wine, New Bottles." American Vocational Journal, 48 (April, 1973), 69-72.

This article expresses the need for teachers in Health Occupations to state performance goals that carefully delineate content, identify conditions under which students will be performing, and clearly define the educational intent. Educational intent must be based on occupational analysis. A procedure for developing performance goals is presented in prototype form.

Hite, Herbert. "The Cost of Performance-Based Teacher Education." Journal of Teacher Education, 24 (Fall, 1973), 221-4.

This article discusses possible costs of PBTE programs in terms other than monetary. The author infers that initial PBTE budgets will be at least two and one half times standard teacher education programs, but after three or so developmental years, budgets are likely to be comparable to such existing programs as student teaching.

Holloway, Lewis D. and Bailey, Larry J. Developing Teaching Competencies Needed by Educational Personnel in Post-Secondary Health Occupations Programs. Final Report. Vol. I. Bethesda, MD: ERIC Document Reproduction Service, ED 060 181, 1971.

The purpose of this project was to stimulate individuals and institutions to conduct short-term teacher education activities for persons in the health occupations field. An institute involving 104 persons was conducted which resulted in a publication of the guidelines and general presentations and a model inservice teacher education course on classroom testing. Recommendations call for continued efforts in Health Occupations Teacher education programs.

Houston, W. Robert. Resources for Performance-Based Education. The University of the State of New York, The State Education Department, Division of Teacher Education and Certification. Albany, New York, March, 1973.

This is an annotated compilation of recently developed instructional materials relevant to performance-based education. The project surveyed potential materials throughout the country, and reviewed, annotated, and indexed them for ready access. It is suggested that "when carefully selected and tailored to appropriate populations and objectives, these new instructional materials can greatly enhance a professional preparation program."

Houston, W. Robert. Performance Education: Strategies and Resources for Developing a Competency-Based Teacher Education Program. Bethesda, MD: ERIC Document Reproduction Service, ED 080 460, 1972.

This paper gives PBTE program designers information on sources and procedures for developing competency/performance-based teacher education programs. Chapters include (1) developmental task, (2) planning and designing, (3) initial development, (4) prototype test and (5) operational task. A bibliography is given throughout the paper. Two evaluation forms are included in the appendix.

Houston, W. Robert. "Designing Competency-Based Instructional Systems." Journal of Teacher Education, 24 (Fall, 1973), 200-4.

This article presents a 10-stage model which employs the systems approach in designing competency-based programs. Model components discussed are: (1) Specify Assumptions or Propositions; (2) Identify Competencies; (3) Delineate Objectives; (4) Indicate Criteria Levels and Assessment Modes; (5) Cluster and Order Objectives for Instruction; (6) Design Instructional Strategies or Modules; (7) Organize a Management System; (8) Implement Program Trial; (9) Evaluate Instructional Design; (10) Refine Program.

Houston, W. Robert and Howsam, Robert B. "CBTE: The Ayes of Texas." Phi Delta Kappan, 55 (January, 1974), 299-303.

This article is an account of the status of teacher education in Texas following the mandating (by the Texas State Board of Education) of CBTE for all of the state's 66 teacher preparatory institutions. The views of two major proponents of CBTE and also of two Texas academicians are presented, each discussing the pros and cons of CBTE. The authors express the opinion that teacher education programs are being "actively reconceptualized" and, generally, that the intent of the CBTE movement is educational and the expectations open and flexible.

Howey, Kenneth R. "Comprehensive Renewal in the Public Schools: The Context and Potential of Teacher Centers." Journal of Teacher Education, 25 (Spring, 1974), 26-30.

This article focuses on the use of teacher centers for teachers-in-service. One of the main functions would be to demonstrate alternative approaches to instruction and schooling as they now exist. It is predicted that teacher turnover will be minimal

during the next 10 years and change will be taking place rapidly, so renewal is necessary at the "scene of action."

Howsam, Robert B. "Management of PBTE Programs." Journal of Teacher Education, 24 (Fall, 1973), 213-20.

This article stimulates thinking about the importance of having a management system that is compatible with and enhances the effectiveness of PBTE. The author points out that existing organizational structure will probably be incompatible to some degree with the PBTE approach; and he proposes the use of the matrix organization in the management system of PBTE.

Howsam, Robert S. "Some Basic Concepts." Report to the Classroom Teachers National Study Conference, (November 26-27, 1971). (Mimeographed).

This report summarizes Dean Howsam's talk to this group, which was concerned with (1) the definition of performance-based instruction, (2) developments in teacher education that enhance PBI, such as individualization, modularized instruction and microteaching, and (3) the effectiveness of teacher-centers. The article closes with a resume of the issues raised at the conference, which included decision making at the institutional level, interpersonal relationships, teaching competencies, evaluation, working conditions, costs, certification and impact on high education. As a group, the conference participants made recommendations to individuals and groups involved in performance-based education, the Professional Association, and to the Student NEA.

Hoyt, Donald P. Identifying Effective Teaching Behaviors. Bethesda, MD: ERIC Document Reproduction Service, ED 039 197, 1969.

This report deals with an evaluation experiment that attempted to discover the relationship between specific types of teacher behavior and success in teaching as shown by student progress in relation to defined objectives. Fifty-eight items were used to evaluate teacher-behavior and effectiveness. The findings showed that at least sixteen items appeared to be required in effective teaching, although they differed according to the size of class and type of objective.

Hunter, Claude C. and Weathers, Tom, Jr. "What You've Wanted to Know about Performance Objectives." Industrial Education, (September, 1973), 22-3.

This article is concerned with presenting a common-sense approach to the topic of performance objectives, what they are, and how to write and measure them. Areas treated are (1) defining the problem, (2) ways of stating objectives, (3) good objectives and bad, and

(4) checking students' progress. The three characteristics of a "good" objective are identified as follows: (1) it describes the physical activity to be performed by the student for the completion of the objective, (2) it lists all the relevant conditions that surround the objective, and (3) it specifies the criteria for successful completion of the objective. Brief examples of each concept discussed are presented for clarification.

Huffman, Harry. "A Model for Generating Performance Goals." American Vocational Journal, 54 (April, 1973), 26-30.

Dr. Huffman uses a flow-chart to show the procedures for developing the conditions of a performance-goal. There are eight steps, which include listing the givens, sources, purposes, methods, outputs, quality measures, time limits, and prerequisites. The final step culminates in a set of performance goals. By the use of a seventy-point model check-chart with the eight steps as headings, performance goals can be written on an individual basis and can eventually become assignments for the students.

Implications of a Model Elementary School Program with Particular Emphasis upon a Performance-Based Program at South Carolina State College. Final Report. Bethesda, MD: ERIC Document Reproduction Service, ED 065 484, 1972.

This article reviews the implications of South Carolina State College's model elementary school program which places special emphasis on performance-based teacher education. System design techniques were used in developing models which had the characteristics of: (1) personalized and individualized instruction; (2) simulated professional laboratory experiences; (3) clinical experiences; (4) modular instructional components; and (5) research-oriented structure. An introduction to the exceptional children component for elementary teacher education and a reference system designation developed for foundations of reading instruction are presented.

The Improvement of Education Through the Use of Video-Tape in Programs for Those Preparing to Become Teachers and for In-Service Programs for Experienced Teachers. Bethesda, MD: ERIC Document Reproduction Service, ED 072 033, 1971.

This article discusses the use of video-tape techniques for improvement of quality of education in preservice teacher preparation programs and in-service teacher education programs; for improvement of teacher placement practices; for assessing individual performance for admission to teacher education programs; and for use in teacher placement credential files. Project cost is given. It is shown that course goals and program objectives were accomplished to a greater degree than they were by previously used techniques.

Interim Report: "Competency-Based Certification." Santa Fe, NM: State Department of Education, January 1, 1973.

This report gives an account of the progress being made in New Mexico toward a competency-based certification system. Some 12 questions are posed which should be looked at by anyone involved in or interested in implementation of a CBTE program, and alternative approaches for solutions to the questions are suggested.

Jenson, Glenn. "Preparing Competent Teachers of Teachers." Educational Leadership, 30 (February, 1973), 428-30.

Jenson expresses a need for preparing teachers who can change, be creative and flexible instead of the more conforming and yielding type typical of today's educational process. He suggests and discusses the following four competencies of teachers: (1) superior in organizational ability, (2) enthusiastic about teaching, (3) a skilled analyst, (4) adept at interpersonal relations.

Johnson, Charles E. "Some Basic Principles Underlying Competency-Based Teacher Education Programs." The University of Georgia, College of Education, Athens, May 22, 1972. (Mimeographed).

This paper presents a list of basic principles or assumptions which have been used as a theoretical basis for designing and developing competency-based teacher education programs. Also included are the program characteristics which are likely to be used in implementation if the principle is applied.

Johnson, Charles E. "Developing Competency-Based Educational Programs for the Preparation and Certification of Professional Personnel." Abstract of paper presented at the annual meeting of the National Association of Teacher Educators of Home Economics of the American Vocational Association, Atlanta, Georgia, 1 December 1973.

The author describes the three assumptions which form the basis of CBE which, when integrated into a focal point for program development, result in a challenge to traditionally accepted programs. Emphasis is on competencies essential to effective performance, provisions for differences among learners and a management system. Other components discussed are: diagnosing learner needs, evaluating learner progress and evaluation of total program.

Johnson, Charles E. "Competency-Based VS Common Educational Practices." Teacher Corps Technical Assistance Project, The University of Georgia, Athens, Georgia, August, 1972. (Mimeographed).

This paper is an attempt to describe some of the practical characteristics of CBE and compare them with characteristics more commonly practiced in education. The presentation is designed for those

who are implementing CBE.

Johnson, Charles E. A Guide to Georgia Educational Model Specifications for the Preparation of Elementary Teachers. Bethesda, MD: ERIC Document Reproduction Service, ED 035 606, 1969.

This article presents an overview of a teacher trainee's learning activities throughout the 6-year program at the University of Georgia. Teacher performance behaviors are at the core of the Georgia model. Learning activities are experienced through the use of proficiency modules (PM), which are defined and discussed.

Johnson, Charles E. and Shearron, Gilbert F. "Generic Teacher Performances Essential to Professional Competence." Competency-Based Education Center, College of Education, University of Georgia, Athens, Georgia, 1973. (Mimeographed).

This article contains a list of some generic professional teacher performances compiled by the authors. They suggest the list can be utilized to determine the extensiveness of a student's preparation for teaching, to structure an educational program for the preparation of teachers, or to suggest those competencies which should be included in the requirements for certification. A distinction is made between "competencies" and "performance." The partial list is adapted from data collected by members of the University of Georgia College of Education Division, which prepares teachers for children in early childhood,elementary and middle school years.

Johnson, Charles E. and Shearron, Gilbert F. Selected Teacher Performance Specifications Generally Applicable to Teacher Education Curricula. Bethesda, MD: ERIC Document Reproduction Service, ED 040 924, 1969.

This bulletin presents selected lists of teacher performance specifications which are generally applicable to teacher education curriculum for undergraduates. Procedures for developing specifications based on teacher behavior are described. The 224 behaviors listed are classified according to cognitive and affective development. Also presented is a list of 80 affective specifications of selected personality characteristics applicable to teacher education.

Johnson, C. E.; Shearron, G. F.; and Payne, D. A. Specifying Assumptions, Goals, and Objectives for Competency-Based Teacher Education Programs. Bethesda, MD: ERIC Document Reproduction Service, ED 068 437, 1972.

This is a proficiency module (PM) developed at the University of Georgia, and is a self-instructional set of learning materials designed for use by teacher educators to learn how to prepare a

theoretical viewpoint to use in developing a competency-based teacher education program. There are four sections: (1) specifying assumptions, goals, and objectives for teacher education; (2) study guide for proficiency module; (3) self-assessment guide for proficiency module; and (4) answer sheets to accompany self-assessment guide for proficiency module.

Jones, Anthony S. "A Realistic Approach to Teacher Evaluation." Clearinghouse, 46 (April, 1972), 474-81.

Jones explores the problem of adequate teacher evaluation and presents a suggested sequence of evaluation procedures using three forms (personal form, self-evaluation form, and student form). Sample instruments of each form are included. This sequence is a positive approach to teacher evaluation for improved teaching with benefits for students.

Joyce, Bruce R. The Promise of Performance (Competency)-Based Education: An Analytical Review of Literature and Experience. Final Report. Bethesda, MD: ERIC Document Reproduction Service, ED 083 147, 1971.

This paper is a review of literature and experience on performance-based education. Chapters include (1) "The Short Form; Best-Guess Working Hypotheses for Competency-Based Education" (summary of frame of reference and recommendation); (2) "Performance-Based Education: Overview and Definitions," (3) "Origins: Where Did Competency-Based Teacher Education Come From?" (4) "Innovations and Competency-Based Teacher Education," (history of educational reform movements), (5) "The Bureau of Research Models: The Application of the Systems Approach," (6) "The Model of the Teacher: Is a Generalist a Set of Specialists?" (7) "The National Teaching Style: The Target of Teacher Education," (8) "What Would be the Nature of a Comprehensive Competency-Based Teacher Education Program?" (9) "What Would be the Nature of a Competency-Based Teacher Center?" An appendix describes presently available soft-ware materials. An extended bibliography is included.

Judson, Madison. "Teacher Centers." Journal of Teacher Education, 25 (Spring, 1974), 44-5.

This is a poem which describes the diversity of teaching centers. They may make use of various spaces and provide for the needs of many individuals.

Kaplan, Leonard. "Competency-Based Teacher Education: The Creation of an Institute for the Research and Development of Competency-Based Teacher Education Programs." Wayne State University, March 8, 1974. Position Paper. (Mimeographed).

This position paper calls for continued leadership by teacher educators at Wayne State University in the field of Competency-Based Teacher Education. It is suggested that at the state level there is expressed support for these concepts: (1) a state-wide accountability model; (2) state-wide pupil performance objectives; (3) competency-based teacher certification; (4) teacher renewal centers; (5) the expansion of professional development programs for current teachers; (6) alternative delivery systems; and (7) need for empirical data concerning program impact on pupil achievement. It is also suggested that the Teacher Education Division establish an "Institute for Research and Development in Competency-Based Teacher Education" having the following proposed functions: (1) to initiate research related to competency-based education; (2) to write proposals and secure grants for the development of competency-based programs in teacher education in cooperation with local educational institutions; (3) to provide leadership in the implementation of the following facets of CBTE: a) a systems approach to program development; b) competency and performance objective determination; c) criterion reference assessment; d) instructional module development; e) follow-up program evaluation; f) field-based operations; g) individualized instruction; (4) to coordinate current teacher education projects in CBTE; (5) to work in cooperation with our Center for Teacher Education and Professional Development, in establishing competency-based centers in the metropolitan Detroit area which support both pre-service and in-service programs; (6) to establish supportive management information systems for CBTE programs; (7) to provide in-service experience for divisional faculty and public school personnel in competency-based education and related issues; (8) to secure, review, assess and maintain a library of materials relevant to CBTE; (9) to write and distribute publications related to CBTE; and (10) to promote inter-divisional and inter-institutional cooperation in activities related to CBTE.

Kaplan, Leonard. "Survival Talk for Educators -- on Teacher Centers." Journal of Teacher Education, 25 (Spring, 1974), 49-51.

This article presents comments made by representatives of school systems in metropolitan Detroit expressing concerns and priorities of teacher centers. Major thrusts included (1) studying children, (2) studying instruction, and (3) studying self.

Kaufman, Barry A. Philosophical and Psychological Rationale for Competency-Based Teacher Education. Bethesda, MD: ERIC Document Reproduction Service, ED 074 049.

In this article, the authors emphasize the philosophical and psychological rationales of competency-based teacher education and systems analysis. The philosophical rationale stressed acquisition of knowledge in teacher education programs. The psychological rationale stressed the manner in which individuals learn, as well as behavioral objectives. Systems analysis emphasized the purpose, process and components of teacher education.

Kay, Patricia M.; Remigoilo, Alice; and Cohen, Barbara. Performance-Based Certification. Bethesda, MD: ERIC Document Reproduction Service, ED 056 991, 1971.

This is an annotated bibliography of 115 citations from 1957 to 1971 and is divided into 5 categories: (1) teacher certification and selection; (2) teacher education; (3) modeling, feedback and audiovisual media techniques; (4) observation, measurement, and evaluation; and (5) research on teacher characteristics.

Kelley, Edgar A. and Zimmer, John W. NUSTEP, A Performance-Based Teacher Education Program: The First Four Years, 1969-1973. Bethesda, MD: ERIC Document Reproduction Service, ED 077 865, 1973.

This report evaluates the Nebraska University Teacher Education Program (NUSTEP), which is a performance-based program. Three general areas evaluated were (1) formal, long-scale objectives analyses to assess the effects of the program on objectively rated academic performance, (2) effects of program on participant attitudes, and (3) effect of the program on generating ongoing research proposals, pilot projects, and instrument development. NUSTEP students showed a greater ability in producing pupil achievement.

Kennedy, Larry D. and Getz, Howard G. "A Competency-Based Preservice Secondary Reading Program." Journal of Reading, 16 (October, 1972), 15-9.

This article presents a brief description of an undergraduate teacher education program in secondary school reading. Instructional modules are discussed and their use described in training teachers. Major categories included are: units of instruction, behavioral objectives, and method of instruction.

Kidd, Ronald V. and Natalicio, Luiz F. S. "Competency-Based Learning: An Analysis of Polyadic Interaction." Educational Technology, 12 (November, 1972), 18-20.

This article attempts to interpret competency-based learning from a psychological (as used in this article: "the study or analysis of behavioral interaction") point of view. Competency-based learning was analyzed as "the process of behavioral interaction among a number of individuals over an undefined period of time." Polyadic is defined as " . . . the behavioral interaction of more than two individuals." A simple systems diagram is used to explain the authors' point of view.

Klassen, Frank H.; Imig, David J.; and Collier, John L. Innovation in Teacher Education: An International Perspective. Bethesda, MD: ERIC Document Reproduction Service, ED 063 272, 1972.

This report presents a sampling of major innovative programs currently at various teacher training institutions. Thirty-nine case studies from Asia, Europe, Latin America and the United States are presented (the majority come from the U.S.). Eight areas of innovation studied were: (1) PBTE, (2) in-service education, (3) field-centered teacher education, (4) educational media, technology and teacher education, (5) teacher education for rural transformation, (6) individualized teacher education, (7) integrated teacher education, and (8) innovation in teacher education at a national level.

Klingstedt, Joe Lars. "Learning Modules for Competency-Based Education." Educational Technology, 12 (November, 1972), 29-31.

This article describes the purposes of learning modules. It also gives a description of the components and functions of each of six identified components of a learning module. The six components discussed are: (1) objectives, (2) pretest, (3) rationale, (4) learning alternatives, (5) post-test, (6) resources.

Klingstedt, Joe Lars. "Philosophical Basis for Competency-Based Education." Educational Technology, 12 (November, 1972), 10-14.

This article discusses the philosophy of education known as "Experimentation," from which CBE evolved. Major issues discussed concerning CBE are: (1) what it is, (2) where it comes from, and (3) where it is going. Describes and illustrates "Process Structuralism" and its relation to competency-based education.

Klingstedt, Joe Lars and Burns, Richard W. Program Design for Performance-Based Teacher Education. Bethesda, MD: ERIC Document Reproduction Service, ED 064 407, 1972.

This article discusses a program which develops performance skills generally evaluated using process and product measures rather than traditional verbal measures. A discussion of four major factors in the organization of a PBTE design: (1) research, (2) development, (3) implementation, (4) evaluation, are given. The essential steps of the above are discussed. For step (1) and (2): establishing time line, identify objectives, scope and sequence of the program. For step 3: logistical considerations, use of learning laboratory, intern selection. For step 4: module effectiveness, intern effectiveness, criteria testing.

Kozlowski, David and Crane, Roger. "The Design and Implementation of a Performance-Based Teacher Education Course in Instructional Technology." Audiovisual Instruction, 17 (October, 1972), 30-3.

Based on the contention that there are two issues (individual needs and institution needs) which press teacher education into the adoption of performance-based instruction, the authors describe in detail the development of a course on technology in education

at Wayne State University. PBTE is suggested as a method to expand curriculum offerings to a larger number of students for a minimum cost and to provide a program which meets the needs of the students.

Langer, Philip. A System for Secondary Teacher Training: Et Tu, Brute? Bethesda, MD: ERIC Document Reproduction Service, ED 073 093.

This paper describes an individualized, analytical, and performance-based secondary teacher-education system at the University of Colorado. The four-phased system is described through a set of objectives, a sequence of activities, and a rationale. The phases covered are: (1) observation, (2) survival skills, (3) unit planning, and (4) student teaching. The teaching staff at the University received training with emphasis on modular instruction, team teaching and evaluation.

Larson, Milton E. and Valentine, Ivan. "Accountability Begins with Preparing Teachers for Trade and Technical Subjects." Technical Education News, 32 (April/May, 1973), 19-21.

This article addresses two critical issues: (1) how should individuals be prepared to teach, and (2) what are the needs for updating teachers? A "2 plus 3 plus 2 plan" is proposed. (Two years of education plus three years of practical work experience in industry plus two years of advanced education.) Curriculum for the two years of advanced education should be performance-based. If this is not possible the new teacher should be involved in preservice teacher education or inservice teacher education. Internships were discussed as a method of helping teachers keep abreast of change.

Lawrence, Gordon. "Measuring Teacher Competencies," National Elementary Principal, 51 (November, 1971), 60-6.

This article reports on research conducted at the College of Education, the University of Florida, at the request of the Florida State Department of Education to build a competency-based approach for the preparation of middle school teachers. Included are: (1) an introduction to the competency approach, (2) a rationale for measuring competencies, (3) the research report, and (4) practical implications of the research. Conclusions drawn were that (1) the competency approach offers little improvement if it is not built on a solid rationale and research base; (2) measuring teacher performance cannot account for the long-term influence on the growth of students and the improvement of schools; (3) the competency approach appears to be suitable for needs of middle school teachers and needs of teacher education. The major contribution of the competency approach appears to be decentralization: self-pacing, self-instruction, etc.

Lessinger, Leon M. "Implications of Competency-Based Education for Urban Children," Educational Technology, 12 (November, 1972), 58-61.

In this article the author expresses a need for urban children to gain competence in the following areas: (1) intellectual discipline, (2) economic independence, (3) citizenship and civic responsibility, (4) social development and human relationships, (5) morals and ethical character, (6) self-realization, and (7) physical well-being and accomplishment.

Lindsey, Margaret. "Performance-Based Teacher Education: Examination of a Slogan." Journal of Teacher Education, 24 (Fall, 1973), 180-6.

Performance-based teacher education, which is a neutral term meaning an act, should be replaced by competency-based, which denotes valued abilities, including the ability to perform in desired ways. The article examines CBTE as a practical movement in preservice education and describes critical steps in developing such a program. The critical steps include:

1. identifying competencies - includes gathering and validating
2. designing instruction - includes assessment and evaluation
3. evaluation of program - includes 5 major points, (2) the plan, (b) the operation, (c) the consequences in terms of teacher behavior, (d) consequences in terms of conditions created by teacher behavior, (e) consequences in terms of pupil progress.

Competence, the paper states, includes knowledge, attitudes and values relevant to performance.

Listing of Professional Vocational Teacher Education Modules Under Development. Cooperative Curricula Development Component, The Center for Vocational and Technical Education, The Ohio State University, October, 1973.

This paper consists of a tentative listing of 123 modules grouped into 10 categories, along with the competencies which form the basis of each module.

Lloyd, Alan C. "Course Content Paves the Way," American Vocational Journal, 48 (April, 1973), 59-63.

Performance goals are easy to state when a correct sequence of steps is the central issue. Performance goals should be applied at each stage, each phase, each level of training. The article discusses research done in the field of business education.

Included is an example by Fred C. Archer on "Handling Incoming Mail" taken from Writing Performance Goals: Strategy and Prototypes published by McGraw-Hill.

Manchak, Paul. "Teacher Educators Briefed on Performance-Based Instruction." American Vocational Journal, 48 (February, 1973), 34-5.

This article describes the step-by-step account of the major research and development effort in performance-based teacher education as reported at the AVA convention, December, 1972, Department of Teacher Education. This research project is operating out of Ohio State University, Center for Vocational Education, with the cooperation of Oregon State and the University of Missouri in developing learning packages. Packages are being validated for content, face, construct and criterion-related validity and can be utilized for either individualized self-instruction or group instruction. Three hundred and eighty-five competencies were identified and categorized in 50 clusters which are the general performance objectives of the learning packages that are to eventually make up a teacher education curriculum.

Margules, Morton and Keith, Virginia M. "A Study of Supervisor's Ratings of Most Effective and Least Effective Industrial Arts Teachers in Three Competency Dimensions." Journal of Experimental Education, 37 (Summer, 1969), 37-44.

This article is an abstract of a study of how supervisors rate Industrial Arts teachers in the competency dimensions of interpersonal relations, teaching techniques, and professional proficiency. A description of the instrument used in the study, the results, implications and recommendations are given. Recommendations included: further exploration using the dimensional approach be undertaken; the instrument used in the exploration be revised; a full range of effectiveness measures to provide more refined data be added to the instrument; more emphasis be given to courses providing an understanding of the learning process and instructional strategies in using industrial arts instructional material; methods to enhance positive interpersonal relations be added to the teacher education programs; and graduate level teacher education programs include courses in evaluation.

Masla, John A. and Arends, Robert L. "Related Problems and Strategies for the Development and Implementation of CBTE Programs." State University College at Buffalo, (February, 1973). (Mimeographed).

This paper discusses the authors' concept of PBTE and describes the process used in the development and implementation of the program at State University College at Buffalo. Included is information related to decisions, problems and alternative

solutions encountered both in the Teachers Corps Project and at other institutions involved in similar projects. The authors suggest that "CBTE is currently the strongest viable alternative in teacher education."

Massanari, Karl. "CBTE's Potential for Improving Educational Personnel Development." Journal of Teacher Education, 24 (Fall, 1973), 244-7.

The author states that CBTE has great potential for generating reforms, intelligent leadership and adequate support for development and research in educational personnel development. Educators are urged by CBTE programs to be facilitators, to personalize instruction, to be innovators, and to continually assess and improve programs.

Massanari, Karl. Performance-Based Teacher Education: What's It All About? Bethesda, MD: ERIC Document Reproduction Service, ED 055 972, 1971.

This paper presented by the AACTE staff project director defines PBTE as "a program designed specifically and explicitly to provide the prospective teacher with learning experience and instruction that will prepare him to assume a specified teaching role." The difference in PBTE and traditional programs is the degree of specificity and explictness. There are 2 types of programs being practiced -- one focuses on teacher performance and the other on student performance. The author includes several promising practices of PBTE and lists some of the problems being raised.

Massanari, Karl. "Performance-Based Teacher Education." Journal of Teacher Education, 24 (Fall, 1973), 179.

An editorial presenting a quick glance of what PBTE is and can be. Massanari describes PBTE as a movement based on evidence of a national study in which 71% of the participating teacher education institutions were involved in PBTE.

Maucker, J. W. "Performance-Based Teacher Education." AACTE Yearbook, (1972), 74-7.

This article discusses the report of AACTE committee on performance-based teacher education and attempts to clarify some of the conflicting opinions and unsatisfactory definitions contained in the paper. Three problems discussed are: the scope, criterion and assessment problems, and political problems of PBTE; and suggestions are made for developing a program.

Maurer, Wallace M.; Kies, Kathleen; and Craig, Samuel B., Jr. (eds.) Generic Teaching Competencies: An Interim Inventory for Subsequent Independent Development by Pennsylvania Colleges and Universities.

Bethesda, MD: ERIC Document Reproduction Service, ED 083 210, 1973.

This paper presents a listing of 66 generic teaching competencies abstracted from 500,000 submitted by 1,400 programs in 83 colleges and universities of Pennsylvania. Each competency is grouped under one of the following headings: theoretical knowledge of educational concepts, implementation of theoretical concepts and information in the classroom, developing students' abilities, teaching techniques, evaluating and measuring students' progress, knowledge of growth and development, and professional attitude. Appendixes include the project program chart, selection criteria, names and addresses of participants in the June workshop, and 403 competency statements from which the generic skills were taken.

Maxwell, W. David. "PBTE: A Case of the Emperor's New Clothes." Phi Delta Kappan, 55 (January, 1974), 306-11.

This article states there are three logically sequential steps in PBTE: (1) stipulating, in behavioral terms, the competencies, (2) devising assessment devices, and (3) designing the program. The author also points out shortcomings of each of these steps.

May, Frank B. "Some Practical Suggestions for Developing Competency-Based, Independent-Study Modules for Teacher Education." Journal of Teacher Education, 23 (Summer, 1972), 155-9.

This article describes the competency-oriented personalized education (COPE) program at the Washington State University Department of Education. The author discusses the rationale for using such a program for education and describes the modules for courses, including the format and a discussion of each topic. Four references are cited.

McAvoy, Rogers and Carter, Alvin R. A Performance Curriculum in Undergraduate Teacher Education. Bethesda, MD: ERIC Document Reproduction Service, ED 039 174, 1970.

This document describes an innovative model designed, and field-tested for undergraduate teacher education at West Virginia University. Flow charts show the model operationalized and progress of students. Included in the program are such things as specification of performance objectives, interaction in a learning center, remedial routes, feedback system and a motivation system. Students critiqued the program by reacting to 32 aspects on a 5 point scale from dislike very much to like very much. Positive results were students' attitude toward performance objectives, self-pacing, and mastery. Negative results were related to instructional materials used in the learning center.

McCarty, Donald J. "Competency-Based Teacher Education." School Management, 17 (October, 1973), 30.

This article attempts to describe the current status of the competency-based teacher education movement. CBTE is discussed through the topics of "what are its aims?"; the emphasis on "individualization" and "field-based experiences"; and the "evaluation" process. Certain objections to the CBTE concept are given. The author states that, "If the advocates of CBTE cannot respond vigorously to these challenges, its potential will be diminished considerably."

McDonald, Frederick J. "The National Commission on Performance-Based Education." Phi Delta Kappan, 55 (January, 1974), 296-8.

This article describes the development of a project, the goals and functions of the national commission, which are (1) to develop a taxonomy of teaching behavior; (2) to develop systems for measuring teaching behavior; (3) to evaluate the effectiveness of training systems which educate for teaching competence; and (4) to develop systems for evaluating the performance of graduates of C/PBTE movement and will be operating from Educational Testing Service headquarters.

Merritt, Daniel L. Performance Objectives for Student Teaching, A Guide for Planning and Evaluation. Bethesda, MD: ERIC Document Reproduction Service, ED 065 475, 1972.

This paper presents guidelines for the planning and evaluation of student teachers' performance based on performance objectives. The objectives orient the student to the role of teacher and assist the supervising teacher. Ten checklists of performance objectives and an appendix with a weekly behavioral objective report are included.

McKenna, Bernard H. "Teacher Evaluation -- Some Implications." Today's Education, 62 (February, 1973), 55-6.

This article gives a comparison of the way teacher evaluation usually is with the way it ought to be. The author discusses many variables that affect performance and learning outcomes and suggests teachers should be evaluated only on those factors they can control. Evaluation of teachers is a complex activity and must have guidance from the national level; NEA is involved in the process.

McMillan, M. M. A Model for a Performance-Based Elementary Teacher Education Program at Shaw University. Final Report. Part II. Bethesda, MD: ERIC Document Reproduction Service, ED 056 974, 1971.

This is the second part of a report on the elementary teacher education program at Shaw University. It describes the current program of elementary education, six models for elementary educa-

tion with a review and synthesis of three models most applicable to Shaw University, and proposed changes in the program of elementary teacher preparation and the master's program in elementary education. In addition, a number of other topics are discussed, such as the development of content for behavioral objectives and various evaluative reports.

Medley, Donald M. Specifications for a New Teacher Examination: A First Approximation. Bethesda, MD: ERIC Document Reproduction Service, ED 055 094, 1970.

This document presents suggestions for constructing a test that would actually predict how a teacher would teach. Three tasks are involved: (1) defining the domain of behaviors contributing to success in teaching that the test must sample; (2) specifying the domains to be covered by the modules of which the test is composed; and (3) constructing items to put into the modules. Cognitive factors in teaching style are included.

Merritt, Daniel L. Developing a Performance Base for Field Experiences: A Grass Roots Approach. Bethesda, MD: ERIC Document Reproduction Service, ED 073 116, 1973.

The report briefly expresses the need for performance objectives specifying teacher behavior. It develops a performance base for field experiences and discusses the purpose of performance objectives in field experiences. The relationship of these objectives to the student teacher, the cooperating teacher, and university supervisor are discussed. A flowchart of "Developing Performance Objectives for Field Programs" is included, along with a four-item bibliography.

Merwin, Jack C. Performance-Based Teacher Education: Some Measurement and Decision Making Considerations. Bethesda, MD: ERIC Document Reproduction Service, ED 077 892, 1973.

This paper suggests that if PBTE is to revolutionize the teaching profession, as is its potential, there must be PBTE evaluation. The paper discusses some basic measurements and decision-making concerns crucial to such evaluation.

Miller, F. Milton. "Utilization of Performance-Based Modules in Teacher Education Programs." 7th Annual National Vocational and Technical Education Seminar. October 22-25, 1973. (Mimeographed).

In this paper, eleven steps are given for writing modules as developed at the University of Missouri in cooperation with the Center for Vocational and Technical Education and The Ohio State University. Based on involvement in writing modules, the author observed that a mix of service areas fostered better understanding, checks and balances are necessary for a quality product, and the professional expertise of a faculty strengthens the project.

Miller, Paul E. "Student-Centered and Product-Oriented." American Vocational Journal, 48 (April, 1973), 34-5.

This article points out the need for vocational technical educators to design performanced-based curriculums which include performance objectives for program levels and for student learning activities with the focus placed on learning that is student-centered and process-oriented, rather than teacher-centered and process-oriented. Five basic characteristics of objectives are explained and eight steps in the process of curriculum development are reviewed. Advantages and drawbacks are also discussed.

Moore, J. William; Biddle, Barry; and Gagne, Ellen. "A System for Increasing the Probability of Teacher Control of Their Teaching Behavior." Educational Technology, 13 (October, 1973), 44-7.

This article describes a "research approach" used in teacher education in training teachers to solve classroom problems through scientific problem-solving methods. Several techniques that have been developed and field tested are discussed -- the most successful being a simulation procedure developed at Bucknell University; peer "pupils" role play various types of students -- the teacher identifies the role, generates and tests hypothesis about how to elicit and maintain desirable behavior and assesses the accomplishment of the objectives of his lesson.

A Model Elementary Teacher Education Program for Social Science Majors. (An Interdisciplinary Approach). Bethesda, MD: ERIC Document Reproduction Service, ED 072 015, 1972.

This document describes one of the first attempts at establishing interdisciplinary cooperation among social scientists and educationists to prepare social science specialists to teach at the intermediate grade levels. Major aspects of this innovative program are its: (1) specialists teacher concept, (2) interdisciplinary thrust, (3) performance-based structure, (4) individualized instruction, and (5) community-based orientation. The program is divided into three phases: foundation experience, integrating experience, and culminating experience.

Morgan, Margaret K. and Canfield, Albert A., eds. Administrative Competencies in Education and the Allied Health Profession. Bethesda, MD: ERIC Document Reproduction Service, ED 074 257, 1972.

This document is a report of a two-day conference sponsored by the University of Florida Center for Allied Health Instructional Personnel to identify competencies of individuals in the health field at the administrative level. Included are four presentations and a list of competencies.

Morris, Victor. "A Minimum Competency Program for the Preparation and Support of Innovative Secondary School Science Teachers." Science Education, 56 (October - December, 1972), 547-55.

This paper discusses current problems encountered by teachers due to changing social and educational conditions, and stresses the need for teacher training institutions to develop appropriate preservice and inservice training programs. A model teacher training program is presented. The model is based on the competency method and is designed to prepare both new and experienced science teachers in secondary schools to provide more relevant learning experiences for their students. Both the teacher training institutions and the secondary schools are involved in a cooperative effort to meet the goals.

Morrison, Edward J. "Pass or Fail: How to Test Performance." American Vocational Journal, 48 (April, 1973), 38-9.

This article states that the principle of measuring the performance to be learned by students is probably violated by instructors more than any other. The following tasks which lead to successful test performance are discussed: (1) setting success criteria, (2) clarifying the test task, (3) identical for all, (4) observation and recording, and (5) simple, objective scoring.

Mueller, Dorothy G. "How to Evaluate Teaching." ERIC Clearinghouse on Teacher Education. Journal of Teacher Education, 22 (Summer, 1971), 229-244.

This is a review of research regarding the problems associated with evaluation of teachers. It concludes that evidence of student change is probably the most direct and reliable criterion; yet means of measuring the change and factors affecting it lack sufficient validity at present. There are two purposes for teacher evaluation: (1) to provide a basis for granting tenure, rehiring and firing; and (2) to promote career development of teachers. Staff members must see the purpose in evaluation or little improvement will occur. Current practices in evaluation are discussed. An annotated reference is included for further investigation.

Musella, Donald. "Improving Teacher Evaluation." The Journal of Teacher Education, 21 (Spring, 1970), 15-21.

This article proposes an examination of the problems existing in teaching-effectiveness research and discusses the need for methods of measuring which teaching behaviors cause which changes in students' behaviors, or which teaching leads to what learning. Evaluators are presently making decisions on intuitive, experience-based judgements rather than research in cause-effect relationships in the teaching-learning process.

Nash, Paul. A Humanistic Approach to Performance-Based Teacher Education. PBTE Series No. 10. Bethesda, MD: ERIC Document Reproduction Service, ED 077 893, 1973.

This document raises questions about the "humanistics" of PBTE. A definition for "humanistic" is given and a general discussion of its certain qualities is presented. These qualities are: (1) freedom, (2) uniqueness, (3) creativity, (4) productivity, (5) wholeness, (6) responsibility, and (7) social humanization. A brief description of the "Texas Teacher Center Project" is given. Also, a discussion of the American Association of Colleges for Teacher Education (AACTE) is presented with a listing of the AACTE Performance-Based Teacher Education Project Committee members.

Nash, Robert J. and Agne, Russell M. "Competency in Teacher Education: A Prop for the Status Quo?" Journal of Teacher Education, 22 (Summer, 1971), 147-56.

This article presents a critical examination of the components of competency-based teacher education. CBTE is seen as but one method to prepare teachers. This method can be effective if it allows for the development of the individual as a responsible agent in educational and social reform. If CBTE ignores the affective domain, it perpetuates the status quo of education. Examples are given.

"Evaluation of Teaching Competence." NEA Research Bulletin, 47 (October, 1969), 67-75.

This report is composed of three articles describing research on the topic. The first describes evaluation practices in 213 school systems. In 199 systems which have a probationary period for teachers, 90 conduct semi-annual evaluations and 80 have annual evaluations. Twenty-nine systems do not evaluate teachers once they reach permanent status. In more than 50% of the systems, the principal is the sole evaluator. The second article discusses a survey of teachers in the spring of 1969 in which 9 out of every 10 respondents thought they should be evaluated. Teachers preferred that both tenured and probationary teachers be evaluated and that the principal should be responsible for the evaluation. The respondents agreed that teacher evaluation should be made for the purpose of improving teacher competence, to keep administration informed of what is taking place in the classroom, to make teachers more responsive to needs of children and to make it possible to dismiss poor teachers. The third article discusses information on the aspects of the evaluation of teachers contained in professional negotiation agreements. Also included are examples of evaluation procedures and criteria.

Neuhauser, Charlotte. "The Design and Implementation of a Management Information System to Facilitate the Functioning of a CBTE Program." Paper presented to the American Educational Research Association, April, 1974. (Mimeographed).

This paper emphasizes the importance of a management information system (MIS) in a CBTE program for the benefit of faculty and students. A description of the MIS used at Wayne State University is given. Flowcharts are used to describe this computer-based system. The appendix gives examples of the tools used in this program.

"New Approaches in the Evaluation of School Personnel." NEA Research Bulletin, 50 (May, 1972), 40-4.

This article discusses the need for more objective methods of evaluating teachers and administrators. Experimental approaches are suggested through the use of: (1) multiple evaluators, (2) performance objectives, (3) multiple bases, (4) in-basket data, and (5) student performance. Each approach is discussed. No one or any combination of these approaches solves the problems of personnel evaluation but they may offer a new approach with opportunities for the involvement of additional people.

Oestreich, Arthur H. "The Professional Growth of the Student Teacher." Phi Delta Kappan, 55 (January, 1974), 335-7.

This paper focuses on several questionable assumptions concerning the student teaching experience. Some questions raised included: (1) How long does the experience need to be? (2) Does a good classroom teacher make a good supervising teacher? (3) What are the role expectations of the student teacher? and (4) How does the student teacher obtain mutual reinforcement on the part of the college professor and the supervising teacher? Reexamination of procedures and practices was determined to be in order.

O'Grady, James P., Jr. and Underwood, David L. "New Movement Underway?" American Vocational Journal, 48 (April, 1973), 80-2.

This article discusses rationale of performance goals in meeting the demand for accountability. Resistance to acceptance in some degree can be traced to the attitude of the teacher. Four major advantages of performance goals include: (1) they assist student in efficient utilization of study time; (2) they permit more precise correlation of educational materials and measuring instruments; (3) they permit development of well-defined, understandable modules of information; and (4) they open the door for educational innovations; learning at one's own pace, open university concept and individualized study. This article also reviews literature which supports the movement.

Okey, James R. and Brown, Jerry L. Competencies for Performance-Based Teacher Training. Bethesda, MD: ERIC Document Reproduction Service, ED 080 457, 1972.

This paper presents a scheme for organizing teaching skills or competencies. Competency clusters were identified and grouped into three experience levels: (1) novice teachers and para-professionals, (2) career teachers, and (3) master teachers or teachers assuming leadership responsibilities. A description is given of how the instruction to teach the competencies can be developed and delivered. The appendix contains a listing of modules.

Olmsted, Ann G.; Blackington, Frank H. III; and Houston, W. Robert. "Stances Teachers Take: A Basis for Selective Admission." Phi Delta Kappan, 55 (January, 1974), 330-4.

This article studied 60 elementary teachers in a two-year internship program. They found they fell into 7 categories: (1) Child Focuser - practiced the belief that schools exist for individual children, (2) Pragmatist - seeks to reconcile the needs of the child to the school, (3) Task Focuser - guides students in mastering assignments, (4) Contented Conformist - works to the achievement of personal goals, (5) Timeserver - believes that teaching does not demand special knowledge nor significantly serves society, (6) Ambivalent - appears to have a disparity between beliefs and what is, and (7) Alienated - displays inability to identify with other teachers or accept the worth of children and schools. It was found that the stance taken could have been predicted when these teachers began their first education courses. The authors proposed that schools of education accept only those predicted to be a child focuser, pragmatist, task focuser, and perhaps, contented conformist.

Ornstein, Allan C. "Systematizing Teacher Behavior Research." Phi Delta Kappan, 52 (May, 1971), 551-5.

Introductory remarks present contradictory information available in research on teacher behavior. The author discusses methods for organizing teacher behavior in terms of: (1) model systems, (2) instructional processes, and (3) teacher behavior characteristics. The model systems are felt to be the most sophisticated. Examples from Flanders, Jensen, Getzels and Thelen, Ryan and Biddle are contrasted with Gage, Unruh, Siegel and Jackson. The paper concludes that teacher behavior may continue to elude classification into any system with clarity.

Panitz, Adolf and Olivo, C. Thomas. National Occupational Competency Testing Project. A Consortium for Occupational Competency Testing of Trade and Industrial Technical Teachers. Phase I: Planning-Organizing-Pilot Testing. Volume 3, Occupational Competency Testing. Bethesda, MD: ERIC Document Reproduction Service, ED 057 217, 1971.

This handbook is intended to assist in the development, administration and evaluation of written and performance tests wherever occupational competency evaluation is basic to employment, upgrading or promotion. The handbook includes: (1) historical background and philosophical concepts of occupational competency testing, (2) advantages and disadvantages of various types of tests, (3) procedures for test development, (4) construction of tests, (5) test administration, (6) procedures for written test ratings and performance evaluation and (7) test evaluation. The final chapter discusses the national urgency for the development of an occupational competency testing program.

Panitz, Adolf and Olivio, C. Thomas. National Occupational Competency Testing Project. A Consortium for Occupational Competency Testing of Trade and Industrial Technical Teachers. Phase II. Bethesda, MD: ERIC Document Reproduction Service, ED 057 218, 1971.

The report on Phase II is divided into three areas: (1) directions for area test center coordination, (2) test development procedures based on field tests during Phase I, and (3) the administration of written and performance tests. Each area is detailed with instructions, specific examples and work sheets.

Parker, Reese. "Weber State College Evaluates IPTE After Three Years." Phi Delta Kappan, 55 (January, 1974), 320-4.

The school of education at Weber State College implemented an IPTE program in September, 1970. Weaknesses seen in the program were: (1) time limitations, (2) failure of coordination between Weber State and public school personnel, (3) establishing reliability and validity for use in assessing measurement devices, (4) failure to enable graduates to deal with minority ethnic groups and different socio-economic levels, and (5) students' need for more interaction informally with faculty and a greater variety of learning experiences. Strengths included: (1) students had feelings of satisfaction, (2) students were able to apply the competencies during their first year of teaching, (3) students were more self-confident, adaptable, student-centered, and able to fulfill leadership roles, (4) faculty members were viewed as individuals, and (5) program permitted identification of its weaknesses.

Parkinson, Blaine P. (Project director). A Proposal to the Carnegie Corporation of NY for Developing an Individualized, Performance-Based, Teacher Education Program. Bethesda, MD: ERIC Document Reproduction Service, ED 040 139, 1969.

Based on weaknesses in the current teacher education program, Weber State College proposes to integrate "valued substance from past with new technologically sound methods, content and experiences" of tomorrow. The project will require a 3-year developmental period. The proposal calls for individualized instructional units. Students are to progress from a study of principles to practice under controlled conditions and then to application

under supervision in a classroom.

Pereira, Peter and Guelcher, William. The Skills of Teaching: A Dynamic Approach. Bethesda, MD: ERIC Document Reproduction Service, ED 049 162, 1970.

This is the second paper in a series which explores weaknesses of the Stanford approach to micro-teaching and suggests improvements which can bridge the gap between theory and practice in teacher education. The paper presents and discusses assumptions which are basic to micro-teaching. Because teaching involves an interaction between people the paper suggests that more emphasis should be put on the acquisition of principles to guide the teacher's actions with secondary emphasis on development of teaching skills.

Performance-Based Teacher Education: An Annotated Bibliography. American Association of Colleges for Teacher Education. Bethesda, MD: ERIC Document Reproduction Service, ED 050 034, 1971.

A 102 item annotated bibliography listing documents and journals published between 1967 and 1970, this publication is grouped under six categories: (1) characteristics of actual or proposed programs, (2) certifying teachers on basis of performance, (3) teacher competence as defined by literature, (4) basic elements of a curriculum, (5) assessment techniques, (6) attitude of teacher organizations.

Performance-Based Teacher Education: Publications and Sources of Information for Educators. Bethesda, MD: ERIC Document Reproduction Service, ED 083 118, 1973.

This document is a selected annotated bibliography of publications and information sources related to PBTE. Six sections are included: (1) general materials about PBTE; (2) performance criteria and evaluation procedures (Group A: General Materials and Sample Lists); (3) PBTE program development programs in operation; (4) PBTE activities in various states (Group A: Connecticutt; Group B: other states); (5) publications lists (Group A: lists of modules; Group B: publication lists and bibliographies), and (6) newsletters relating to PBTE. Price information and availability of each citation are given.

Perry, Richard R. "Institutional Research -- Evaluation of Teaching Behavior Seeks to Measure Effectiveness." College and University Business, 47 (October, 1969), 18,22.

This report describes a study at the University of Toledo on identifying effective teaching behaviors and determining their relative importance. Initially 13,643 behaviors were identified and categorized into 60 criterion behaviors for validation by students, alumni and faculty. Findings are presented in chart form.

Poliakoff, Lorraine. Structured Practice in Teaching: A Bibliography of ERIC Documents. Bethesda, MD: ERIC Document Reproduction Service, ED 048 123, 1971.

A 414 item bibliography including descriptors of ERIC articles processed between July, 1968, and June, 1970, related to "means and methods by which pre- and in-service school personnel can secure structured practice in developing skills and insights."

Pope, Jesse Rondo and May, Frank B. A Comparison Between Two Performance-Based Teacher Education Programs: Independent-Study Modules vs. Regular Group Instruction. Bethesda, MD: ERIC Document Reproduction Service, ED 072 039, 1971.

This article compares two performance-based teacher education programs at Washington State University. One presented content through independent study modules and one through regular classroom interaction. It was concluded that independent study can be as effective or more effective than group instruction.

Pope, Billy N. (Project director). A Search for Common and Unique Teaching Skills and Knowledge in Occupational Education and Technology at the Secondary and Post-Secondary Levels Combined. Project Report submitted to the Division of Occupational Research and Development, Department of Occupational and Technical Education, Texas Education Agency.

This book describes a study in Texas to determine areas of commonality in teacher competencies across vocational-technical service areas at the secondary and post-secondary levels. Competencies were categorized into the following performance areas: instruction; program planning development and evaluation; management; guidance; school-community relations; student vocational organization; professional role and development; and coordination. Of the 291 competencies identified as important, 146 were considered common to the five service areas surveyed. Another 44 were common to 4 out of the 5 areas. Secondary areas surveyed included: Trade and Industrial Education, Distributive Education, Gainful Homemaking, Vocational Office Education, and Health. Programs surveyed at the post-secondary level were: Distribution and Marketing, Office Education, Technical Education, Industrial Education, Health Occupations. Some nine performance elements in the category of school-community relations were identified which no program area considered as important. Complete study information is given, including a listing of the teacher competencies and their statistical data.

Popham, W. James. Performance Tests of Instructor Competence for Trade and Technical Education. Final Report. Bethesda, MD: ERIC Document Reproduction Service, ED 027 418, 1968.

This report describes research conducted in the area of Trade and Industrial education to assess the ability of performance tests to distinguish between the experienced teacher's and the non-teacher's ability to achieve pre-specified instructional objectives. Both groups were given operationally defined objectives with approximately 10 hours for presentation. Pre-test revealed no systematic differences between the performance of the teacher and non-teacher group. The two areas in the study were: auto mechanics (carburetion) and electronics (power supplies).

Popham, W. James. "The Performance Test: A New Approach to the Assessment of Teaching Proficiency." Journal of Teacher Education, 19 (Summer, 1968), 216-22.

Popham presents the rationale for a new approach to the assessment of teaching proficiency and describes a project at UCLA to measure teacher effectiveness in promoting learner achievement through performance testing. Two groups of students were selected. One group was instructed by experienced teachers; the other was taught by non-experienced lay people. Pre- and post- tests were administered with results showing more learner growth in the group instructed by experienced teachers.

Popham, W. James. Applications of Teaching Performance Tests to Inservice and Preservice Teacher Education. Bethesda, MD: ERIC Document Reproduction Service, ED 077 972, 1973.

This is a paper presented at the annual meeting of the American Educational Research Association which discusses the use of minilessons to reach objectives of teaching. The appendix contains Minilesson Clinic Guidelines. An annotated bibliography of teaching performance test articles is included.

Popham, W. James. "The New World of Accountability: In the Classroom." NASSP Bulletin, 56 (May, 1972), 25-31.

This article emphasizes that accountability in education is being demanded. California legislation requires that all K-12 teachers be evaluated by locally devised teacher appraised systems which must include learner progress. Devices for measuring student progress must be developed. Suggested were the development and refinement of criterion-referenced measures, and the teaching performance test.

Popham, W. James. Validation Results: Performance Tests of Teaching Proficiency in Vocational Education. Bethesda, MD: ERIC Document Reproduction Service, ED 027 260, 1969.

This paper explains a project undertaken to develop and validate a method of assessing teacher competence through the use of pupil performance tests. Teachers were given a list of specific objectives

and directed to teach the objectives. Competence of the teacher was measured in relationship to how their students performed on pre- and post-tests of behaviors stated in the objectives. Results indicated that the experienced teacher is no more effective than the non-teacher in changing student behavior in terms of previously established instructional objectives.

Popham, W. James. "Objectives-Based Management Strategies for Large Educational Systems." Journal of Educational Research, 66 (September, 1972), 4-9.

This article addresses the question, "How should we go about promoting improvements in the educational enterprise?". The author proposes a systems analysis approach. Components of such a system are discussed. These include: measurable objectives, goal determination, monitoring progress, evaluation and modification.

Popham, W. James. "Teaching Skill Under Scrutiny." Phi Delta Kappan, 52 (June, 1971), 599-602.

Research shows that there are little differences in the teaching ability of experienced teachers and others. Dr. Popham advocates that the most important role of the teacher is to modify learners to enable them to live and work in society and that teaching performance can be improved through the use of teaching performance tests. Popham discusses the development and validation of tests in the areas of social science, auto mechanics and electronics during a four-year study at UCLA.

Popham, W. James. "Minimal Competencies for Objectives-Oriented Teacher Education Programs." Journal of Teacher Education, 25 (Spring, 1974), 68-73.

This article represents a defense for the belief that fewer competencies should be used as the organizing structure for teacher education programs. An objective-oriented teacher education program is described. Also, three "minimal" competencies are identified. They are: (1) teachers must be able to achieve pre-specified instructional objectives with diverse kinds of learners; (2) teachers must be able to both select and generate defensible instructional objectives; and (3) teachers must be able to detect the unanticipated effects of their instruction. Following a discussion of the competency, an alternative assessment tactic for the competency is presented.

Popham, W. James. "Found: A Practical Procedure to Appraise Teacher Achievement in the Classroom." Nation's Schools, 89 (May, 1972), 59-60.

This article presents a description of a teaching performance test and suggests its use as a possible method to evaluate the competency

of a teacher. This method has two major uses for accountability in education: (1) instructional improvement, and (2) skill assessment. Popham suggests using the teaching performance test in selecting the most competent teachers applying for jobs. An example test is included with addresses for obtaining additional information.

Popham, W. James. Development of a Performance Test of Teaching Proficiency, Final Report. Bethesda, MD: ERIC Document Reproduction Service, ED 013 242, 1967.

This report summarizes a project to develop and validate the use of performance testing as a method of assessing teacher competence. To validate the method, comparisons were made between experienced teachers and non-teachers in the area of social sciences. Success was measured by student growth. Results indicated that experienced teachers are not more effective than non-teachers.

Popham, W. James. Behavioral Objectives and Teaching Skills. Bethesda, MD: ERIC Document Reproduction Service, ED 036 228, 1969.

This is an abridged address concerning the preparation of behavioral objectives for foreign language. Included are procedures necessary for the development of curriculum and attainment of instructional objectives. Other topics are the instructional objectives exchange at UCLA and performance tests of teaching proficiency developed at UCLA.

PBBTE. Pilot Projects on Performance-Based Teacher Education. No. 3. March, 1973. Bethesda, MD: ERIC Document Reproduction Service, ED 081 230, 1973.

This document is composed of four sections. They include: Section 1 -- a discussion of in-service education and a brief overview of the book by Louis Rubin entitled Improving In-Service Education (1971); Section 2 -- a discussion of a CBTE model for in-service elementary teachers at University of Bridgeport (Multiple Alternatives Program -- MAP); Section 3 -- an announcement of a PBTE conference to be held in Boston, April 16-17, 1973; Section 4 -- an announcement of the existence of the clearinghouse for the Connecticut Pilot Projects on PBTE.

Potter, David A. A Research Strategy for Performance-Based Education. Bethesda, MD: ERIC Document Reproduction Service, ED 076 585, 1973.

This document centers on a program of research and development for perfecting performance-based teacher training and assessment techniques. The program is described as being: 1) field-centered; 2) achievement oriented; 3) based on a conceptual model; and 4) encompassing a range of behaviorally established skills. The author states that a program of this type is already underway at Educational Testing Service (ETS), but that the national efforts are as yet fragmented and uncoordinated. Also, he states that the only

way to assess the student educator is to assess how well his students perform.

Pucel, David J. and Copa, George H. "Monitoring Individualized Student Progress in Vocational Education Programs." Educational Technology, 13 (October, 1973), 54-7.

This article presents a description of a model system for monitoring student progress and program effectiveness and efficiency in vocational education. "Time" and "performance" were identified as the measures of individual progress and program effectiveness. Efficiency of the program was determined by the inclusion of cost information. The model was designed to facilitate decision-making by administrators, teachers, and students.

Pursley, Peter. Evaluation of National Center for Educational Research and Development/Teacher Corps Competency-Based Education Development Project. Bethesda, MD: ERIC Document Reproduction Service, ED 065 466, 1971.

This report is an evaluation of Teacher Corps interns trained by a CBTE approach in San Francisco. The evaluation was primarily concerned with the project's impact on the interns and the teaching skills acquired by the interns as a result of participation. Key participants were interviewed and a review and analysis of project records, proposals, memoranda and reports were made. Recommendations included a viable student selection process and funding based on a fee-per-student-successfully-trained basis.

Quirk, Thomas J. "Performance Tests for Beginning Teachers: Why All the Fuss?" Educational Technology, 13 (May, 1973), 14-6.

In this article the writer supports the assumption that paper and pencil tests are not sufficient in predicting the success of a teacher, and he advocates performance tests which more efficiently approximate the actual conditions of the classroom. Three types of performance tests are described: recognition, tests, simulated condition tests, and work sample tests. Ten steps in the development of a performance test are described in detail: (1) specify objectives, (2) select critical aspects of the student's performance, (3) specify performances to be measured, (4) write specification for test, (5) devise test situation specifying condition under which the performance is to be determined, (6) conduct extensive pilot tests, (7) write detailed test manual, (8) train test supervisors, (9) collect data on the population to be studied by the test, (10) score resulting data and develop norms or cut off scores for acceptable performance. "Once developed, a performance test can be studied to see whether it can be used to predict success in subsequent on-the-job teaching performance, to diagnose training deficiencies in prospective teachers so that they can receive additional training on specific teaching skills and to establish a criterion measure against which other modes of testing procedures can be validated."

Quirk, Thomas J. "Some Measurement Issues in Competency-Based Teacher Education." Phi Delta Kappan, 55 (January, 1974), 316-9.

This article discusses certain measurement problems that should be the concern of those who attempt to assess teacher competence or teacher behavior. Topic headings include: (1) performance-objective lists; (2) performance measures reliability; (3) the percent correct passing score; (4) the multiple cutoff model; and (5) evaluation model inadequacy. The author concludes that ". . . the problem of trying to link teacher behavior to student outcomes . . . will be met only if the preservice measures of teacher competence are of adequate reliability and validity."

Rosner, Benjamin and others. The Power of Competency-Based Teacher Education. Bethesda, MD: ERIC Document Reproduction Service, ED 069 618, 1972.

This report ("The Rosner Report") is based on the findings of the committee on National Program Priorities in Teacher Education in 1971. Section I describes the rationale for competency-based teacher education and certification and proposes recommendations for planning and developing such a program. Elements of the proposed program include:

1. five year period for planning and coordinating;
2. training laboratories -- one hundred should be established with a minimum training capacity of 20,000;
3. instructional materials -- twenty million dollars be allocated for developing, field-testing, packaging and distributing materials over the 5-year period;
4. instruments to define performance criteria for development of competencies in actual classroom settings;
5. career development -- establishing educational specialty boards offering competency-based certification to master level teachers and teacher trainers.

Section II includes papers prepared by the committee.

Ricker, Kenneth S. and Hawkins, Michael L. Testing a Science Education Proficiency Module with College Students. GEM Bulletin, 70-72. Bethesda, MD: ERIC Document Reproduction Service, ED 042 695, 1969.

This bulletin is a report on the second study designed to determine the effectiveness of the use of a proficiency module, "Magnetism, Electricity, Heat, and Microscopic Viewing in Science Instruction," to be used in an elementary science methods course. Two aspects were studied: (1) whether significant learning occurred through use of the module, and (2) to investigate students' reactions. Twenty senior students were used and three weeks were alloted to complete the unit. Pre-tests were administered and participants were given options in selecting learning activities for acquiring each competency. Post-tests revealed significant change in students' performance; all achieved the same objectives through diverse learning activities. Most students reacted positively to the method of learning.

Reagan, Gerald M. and Pratte, Richard N. "An Understanding of Schools: An Aspect of Teacher Competence." Theory Into Practice, 12 (May, 1973), 1-4.

This article discusses the present dissatisfaction with education and the current interest in improving education by improving the competence of teachers. Three traditional criteria for judging teacher competence are discussed: 1) knowledge of the subject to be taught, 2) certain natural endowments such as pleasing personality, patience, fondness for children and mental stability; and 3) knowledge of the students to be taught. A further condition for teacher competence is suggested, namely that teachers be competent in understanding the role of schools and schooling in our society. The author recommends that additional emphasis be placed on "Foundations of Education" in teacher preparation programs.

Reese, Robert M. Trade and Industrial Teacher Education and Certification. Report of a National Invitational Research Development Seminar. Bethesda, MD: ERIC Document Reproduction Service, ED 025 644, 1968.

This report tells of activities of a seminar held in October, 1967, to study need for research for teacher education and certification in trade and industrial education. It included several papers presented during the conference, including: 1) trade and industrial research in teacher education and certification since 1963, 2) basic certification requirements for trade and industrial teachers, and 3) mini-proposal format. Four mini-proposals the group developed are: 1) what professional competencies are needed for successful teaching? 2) a model for the measurement of occupational competency, 3) what might be the most desirable preservice experience for new teachers? and 4) relationship of occupational competency to student achievement.

Rice, Frances. "Competency-Based Education and the Open Classroom." Educational Technology, 12 (November, 1972), 56-8.

This article discusses advantages and disadvantages of the open classroom versus the traditional classroom as applicable to competency-based education. A description of an open classroom is given: the teacher's role as diagnostician, tutor, advisor and evaluator; and the student's role as one of responsibility for his learning style. Both students and teachers are responsible for objectives of the teaching-learning experiences.

Richards, Philip H. Analysis of the Delphi Survey 1972-1973. Bethesda, MD: ERIC Document Reproduction Service, ED 077 885, 1973.

This speech was presented at the AOTE National Invitational Conference Redesigning Teacher Education. Pre-conference input describes the use of the Delphi Technique, consisting of four steps: 1) each participant is asked to write his opinion on a

specific topic; 2) each participant is asked to evaluate all opinions in terms of a given criterion; 3) each participant receives a list and summary of the responses and is asked to revise his opinion or state his reason for not doing so on items on which he differs; 4) each participant receives the list with an updated summary including minority opinions and is asked to repeat or revise his own opinion. The technique assures that all opinions will be arrived at independently and yet be informed opinions.

Richey, Rita C. "Competency Identification: A Position Paper." Michigan COAST Project (Competencies of All Secondary Teachers), 1974. (Mimeographed).

The paper describes the position of the Michigan COAST Project (Competencies of All Secondary Teachers) on competency identification. The definition of a competency, format to be used, purpose, categories for classification, and guidelines for selection are given.

Ricker, Kenneth S. and Hawkins, Michael L. Reactions of College Students to a Science Education Proficiency Module. Bethesda, MD: ERIC Document Reproduction Service, ED 040 928, 1969.

This document describes a study conducted at the University of Georgia, College of Education, to determine the effectiveness of individualized learning through the use of a proficiency module. Seventeen senior students were given copies of the modules and laboratory handbook guides for the laboratory practicism. Each student was responsible for choosing the learning activity that would best help him acquire each performance behavior. The instructor was available to work with students who needed assistance. From the data collected, it was determined that this method of learning provided "motivation, individuality, success and the desire to do further study without fear and frustration." All the students in the experimental group reacted positively toward the program.

Ritz, William C. and Wallace, Charles W. How to Conduct a Workshop. Bethesda, MD: ERIC Document Reproduction Service, ED 065 486, 1970.

This document provides a step-by-step guide to planning a workshop, especially useful for in-service education. Readers are encouraged to read sections applicable to them. Examples are for a science workshop, but principles apply to any.

Robb, Felix C. "The Changing Expertise: Impact on Teacher Education." Presented at the Seventh Annual National Vocational and Technical Teacher Education Seminar, Dallas, Texas, October 22-25, 1973.

This paper discusses teacher education and how it has been slow to change. It describes the many societal changes in our world

today and proposes the question, "What ought education's responses be?" Six suggestions are made for developing true expertise in the graduate and undergraduate centers: 1) mastery of currently relevant content, 2) consciousness of the teacher's place in the educational system, 3) insight into the nature of man, 4) development of philosophy of education that establishes the nature and parameter of purpose, 5) the expert educator recognizes he is, first and foremost, himself a learner, and 6) utilization of the latest learning systems and ideas.

Rosner, Benjamin. "The Promise of Competency-Based Teacher Education." New York University Education Quarterly, 4 (Spring, 1973), 2-6.

The author expresses his opinion that the present system of teacher education is not successful. PBTE will also be useless unless state certification can overcome empirical shortcomings. The author suggests that new instructional materials must be created for training teachers, measurement procedures will be vital components of teacher training, and the setting for training teachers will move from the university into actual classrooms. Certification will then move from completion of courses to the acquiring of competence.

Rosner, Benjamin and Kay, Patricia M. "Will the Promise of C/PBTE Be Fulfilled?" Phi Delta Kappan, 55 (January, 1974), 290-5.

This article states that C/PBTE may be the most significant lever to happen in education since Sputnik or another government-subsidized fad. The present scope, promise, problems and unresolved issues are discussed. The author feels the CBTE is a transitional model that can put teacher education on a firm theoretical and empirical base.

Roth, Robert A. "The Competency Movement and Science Education." Science Education, 57 (1973), 361-4.

This article discusses a trial performance-based teacher certification project conducted by the Science Teacher Association of New York State (STANYS). The task force is revising and refining criteria specific to the teaching of science and is concerned with how this criteria will be utilized in the certification process.

Roth, Robert A. Performance-Based Teacher Certification: A Survey of the States. Bethesda, MD: ERIC Document Reproduction Service, ED 070 753, 1972.

This report describes the status of performance-based teacher education in each state and the District of Columbia. The author states that a certification system is considered performance based when it contains provisions in state regulations providing for performance-based teacher education or accepting demonstrated

competency for certification.

Roush, Robert E. and Holcomb, J. David. "Teaching Improvements in Higher Education: Medical Education May Be the Leader." Phi Delta Kappan, 55 (January, 1974), 338-40.

This article examines the beliefs that teaching improvements in higher education, in general, have been slow in coming about. It is emphasized that the attainment of the doctorate title is usually the sole criteria for initial employment in higher education. Medical education is examined, and two major educational innovations that it now employs are: 1) the use of technology in teaching and learning, and 2) curriculum design. Units for educational research and development now assist the medical faculty in improving teaching and learning and in conducting educational research and developing new curriculums. It is suggested that all areas of higher education may profit from the success medical schools have gained through teaching improvements.

Ryan, Kevin A. A Plan for a New Type of Professional Training for a New Type of Teaching Staff. Bethesda, MD: ERIC Document Reproduction Service, ED 029 810, 1968.

In this article the author appeals for teacher training to be performance-based, as suggested by Franklin Babbitt fifty years ago. The inservice program should provide for effective and continuous training for a differentiated staff. It should be an extension of the preservice program, help sharpen the teacher's professional skills, and help identify and utilize the special competencies of teachers.

Ryan, Maurice E. "Directions and Criteria for Performance Goals: A Kind of Road Map." American Vocational Journal, 48 (April, 1973), 31-3.

This article presents a step-by-step guide for writing directions and criteria to assist instructors in preparing specific instruction plans for an individual performance goal for students in vocational education programs. Directions are given in the following task sequence: 1) becoming aware, 2) gathering resources, 3) applying resources, 4) continuing procedures, 5) evaluation and revision, 6) final procedure, and 7) reporting results. The purpose of each task is identified and directions are given, including checkpoints. The author compares the procedure to a road map.

Sandefur, J. T. and Adams, Ronald D. "Assessment in Action: A Case Study of Second-Year Teacher Education Graduates." Journal of Teacher Education, 24 (Fall, 1973), 248-9.

This article describes a study to assess the professional competencies of second year teacher education graduates from Western Kentucky University following the introduction of the new Standards for the

Accreditation of Teacher Education in 1970. Questionnaires are sent to graduates for assessment of the program and to the school administrator requesting his assessment of the professional competencies of the institutional graduate. A random sampling of twenty elementary and twenty secondary teachers will be evaluated annually. Data will be coded and stored in the computer for a permanent data base. Reports will be made annually and be available to faculty.

Sandoz, Ellis. "CBTE: The Nays of Texas." Phi Delta Kappan, 55 (January, 1974), 304-6.

This article describes the reactions of many of the academicians in Texas colleges and universities of the mandating of statewide competency-based teacher education programs in June, 1972. The mandate requires that CBTE be woven into each course of the prospective teachers. The professional groups are seeking a ruling against the mandate, which they regard as a violation; they question the legality of imposing a single approach to teacher education. The author concedes, "any professor is entitled to embrace CBTE and teach it if it lies within the parameters of his subject."

Scannell, Dale P. The Use of the Delphi Technique to Gain Consensus of the Professional Education Components of Teacher Certification Requirements in Kansas. Final Report. Bethesda, MD: ERIC Document Reproduction Service, ED 072 025, 1972.

In this report the technique of using the Delphi Method is discussed. Findings in the study indicate the sample group, composed of lawmakers, educators, teachers, administrators, and parents, thought that essentially all teacher education content was important. Most important were thought to be those items relating to classroom operations. Less important were competencies related to philosophy and history of education. Samples of questionnaires and letters to subjects are included.

Schalock, H. Del. "A Competency-Based, Personalized and Field-Centered Model of an Elementary Teacher Education Program." Adapted from Schalock, H. D. and Hale, J. S. (eds.). A Competency-Based Field-Centered Systems Approach to Elementary Teacher Education. Volumes II, III, and III. Final Report for Project No. 89022, Bureau of Research, Office of Education, U.S. Department of Health, Education, and Welfare, 1968.

This article describes the Comfield Teacher Education Model -- a problem-solving model that is goal-oriented and continuously adaptive on the basis of empirically-based feedback. Four distinct features of the model are described: 1) the demonstration of competence in the performance of teaching tasks as a basis for certification, 2) the characteristics of a teacher education program that is personalized, 3) the involvement of a genuine partnership with the schools, and 4) a management system which can support the demands of a competency-based, personalized and field-centered

teacher education program. The assumption is made that if prospective teachers engage in an educational experience in a way which gives it personal meaning and they become independent, self-directing learners, they will create a similar kind of learning experience for the children they teach.

Schalock, H. Del. The Focus of Performance-Based Certification Knowledge, Teaching Behavior, or the Products that Derive from a Teacher's Behavior. Bethesda, MD: ERIC Document Reproduction Service, ED 045 550, 1970.

In this document, the author questions the basis for determining what type behaviors should be included in CBTE. Should knowledge level alone be used or should performance beyond the knowledge level be included? If these higher levels are included, problems in measurement are presented. It is suggested measurement is simplified if the product of teaching, not teaching behavior itself, is measured. A number of relevant issues are raised.

Schmieder, Allen A. and Yarger, Sam J. "Teacher/Teaching Centering in America." Journal of Teacher Education, 25 (Spring, 1974), 5-12.

This article studies the movement of "teacher centering" in America. Various synonymous terms for "teacher centers" are identified and a "generally-specific" definition for a teaching center is presented. Seven organizational types of teaching centers are identified and discussed. They are: 1) the Independent Teaching Center; 2) the "Almost" Independent Teaching Center; 3) the Professional Organization Teaching Center; 4) the Single Unit Teaching Center; 5) the Free Partnership Teaching Center; 6) the Free Consortium Teaching Center; 7) the Legislative/Political Consortium Teaching Center. Four functional types of teaching centers are identified and discussed. They are: 1) the Facilitating Type Teaching Center; 2) the Advocacy Type Teaching Center; 3) the Responsive Type Teaching Center; and 4) the Functionally Unique Type Teaching Center. Six topics concerning the nature and character of centers, based on information obtained in the National Center Survey, are identified and discussed. They are: (1) governance, (2) consortium, (3) programs, (4) incentives, (5) staffing, and (6) center financing.

Schurr, Alexander. "An Accountability and Evaluation Design for Occupational Education." Educational Technology, 11 (March, 1971), 26-37.

This article stresses the need for an improved accountability system in occupational education and proposes an accountability design or model that would insure better educational opportunities for all Americans. The author's criticism of the present system is the lack of systematic organization of the immense

amount of data, and he proposes in his model using a computerized system with various manipulations that can be made on a wide range of data and provide immediate feedback.

Shavelson, Richard J. "What Is the Basic Teaching Skill?" Journal of Teacher Education, 24 (Summer, 1973), 144-51.

This article discusses how decision making is seen as the basic teaching skill. Questioning, explaining, reinforcing, and probing are skills from which the teacher must choose. Skills such as listening and hypothesis generation aid in decision making. Research on teaching should closely examine the teacher's decisions, and decision making should be included as an integral part of a teacher's training.

Shearron, Gilbert F. Selected Generic Competencies with Indicators for Elementary Teachers. Competency-Based Education Center, College of Education, University of Georgia, Athens, GA.

This document lists a number of generic competencies of teachers. Included under each competency are various performance indicators, either direct or indirect. The direct indicator (the teacher) category includes activities engaged in by the teacher. The indirect indicator (the learner) category includes an "activity" and a "products" section of the student's involvement. Approximately 26 generic competencies are presented.

Shearron, Gilbert F. and Johnson, Charles E. Specification Worksheets for Cognitive Processes and Affective Behaviors. Bethesda, MD: ERIC Document Reproduction Service, ED 040 933, 1969.

This bulletin presents teacher performance specifications for the two areas: cognitive processes and affective behaviors. This includes 12 objectives of the elementary school instructional program in cognitive processes and 11 objectives for the program in affective learning behaviors, teaching behaviors and the suggested specifications for a teacher education program.

Shearron, Gilbert F. and Johnson, Charles E. Specifications Worksheets for Behaviors Drawn from Educational Principles. Bethesda, MD: ERIC Document Reproduction Service, ED 040 934, 1969.

This bulletin describes the worksheets used in developing the teacher performance specifications for the preparation of elementary school teachers for the Georgia Educational Model. Specifications were obtained from the following sources: desired pupil behaviors, established educational principles and observation of teachers on-the-job. Principles of learning, instruction and organization are listed with related teacher objectives and behaviors. Specifications for a teacher education program are suggested.

Shearron, Gilbert F. and Johnson, Charles E. "A CBTE Program in Action: University of Georgia." Journal of Teacher Education, 24 (Fall, 1973), 187-93.

This paper discusses the University of Georgia competency-based teacher education program in elementary teacher education. The program is only partly implemented. Stage one, development of the instructional component, and stage two, implementation of the comprehensive program model, are in operation; by 1975 all preservice students will be involved in the program. Basic assumptions underlying the Georgia position on CBTE are stated, approaches in identifying competencies are described, criteria for assessment are explained, and the instructional component is discussed in detail.

Shearron, Gilbert F. and Johnson, Charles E. Portal Schools for the Georgia Educational Model. Georgia Educational Models, the University of Georgia, College of Education, Athens, Georgia. GEM Bulletin, 71-7, 1971.

This paper discusses the Portal School concept and describes the Portal Schools in operation at the University of Georgia. The Georgia Education Model is a performance-based, field-centered teacher education program providing transition of University student teachers from the preservice phase to full-service teaching in the inservice phase. The four types of field experience blocks are described in detail showing the varied learning experiences of student teachers with leadership of the university staff.

Shearron, Gilbert F. and Johnson, Charles E. A Prototype for a Competency-Based Proficiency Module. Bethesda, MD: ERIC Document Reproduction Service, ED 042 693, 1969.

This document presents a prototype of one kind of module used in the Georgia Educational Model for the preparation of elementary teachers. Proficiency modules contain general directions to the student, lists of prerequisites, pre-tests, performance specifications and behaviors the student must demonstrate proficiency in, and learning resources.

Shepardson, Richard D. "A Survey (Utilizing the Delphi Method) to Assess and Objectively Display the Arguments For and Against Developing a Performance-Based Teacher Education Program." Journal of Teacher Education, 23 (Summer, 1972), 166-8.

The author of this article discusses the use of the Delphi Technique in determining administrators' views of the advantages and disadvantages of a PBTE program at the University of Texas. For illustration, some of the survey outcomes are given. The author states this procedure "has much to offer in making problem-solving and decision making a more creative and effective process."

Shuster, Susan K. "A Proposed Performance-Based Training Program for Special Education Teachers." Viewpoints, 49 (January, 1973), 25-49.

This article reports the progress of a team of special educators who are analyzing the needs of undergraduate prospective special education teachers, and developing strategies and techniques to meet these needs. The PBTE program is concerned with the individual as he prepares to teach and the students he will teach. Included is a list of competencies (in the areas of observational techniques, diagnostic techniques, teaching skills, and administration and management of educational and social environments) prepared by the undergraduate program development committee for the trainees. Information regarding implementation of undergraduate competencies in a practicum setting, and evaluation of the process and product is also included.

Silvius, G. Harold and Ford, Andrew F. The Report of the Michigan Study of Industrial Teacher Competence. Bethesda, MD: ERIC Document Reproduction Service, ED 014 529, 1965.

This report describes a broad study to determine the necessary steps to be taken to maintain a strong industrial teacher education program. Respondents were taken from business, labor and various levels of education. The study resulted in eight action proposals including initiation of a program at Wayne State to update and extend teacher competence of industrial educators.

Sinatra, Lewis J. "Performance-Based Teacher Education: It Can Be Transformational." Educational Technology, 13 (August, 1973), 60-3.

This article describes changes that are currently needed in teacher education: conservational changes center on improvements made within the organization, and transformational changes focus on the needs of the environment. An outline for a transformational-oriented, performance-based teacher education program is given depicting the roles of the teachers as diagnoser, prescriber, and implementor.

Sinatra, Lewis J. and Masla, John A. "Performance-Based Teacher Education -- A Reply to a Critic." Educational Technology, 13 (April, 1973), 33-5.

This article is written to refute criticism of PBTE as being mechanistic. The authors see competencies as aids to helping a teacher do a better job, not as ends in themselves. The relationship of CBTE to educational philosophy is discussed.

Smith, Emmitt D. "The State of the States in Teacher Centering." Journal of Teacher Education, 25 (Spring, 1974), 21-5.

This article presents the results of a study conducted which involved all fifty U.S. states and their reported involvement in the development or use of "teaching centers". Information was obtained from each state department of education office which dealt with teacher education and certification. Responses were limited to three areas: 1) state legislation related to teacher centers; 2) state administrative provisions related to teacher centers; 3) state level study related to teacher centers. Survey results are presented under four categories: (1) Category A: No action; no state-level. (2) Category B: No action; state-level study. (3) Category C: No legislation; administrative provisions and state-level study. (4) Category D: Legislation; administrative provisions and state-level study. Data for each category are given. It is reported that "approximately one-third of the states have passed legislation and/or administrative regulations which . . . relate to the teacher center movement in the United States." "Teacher centering" status of 23 states is given. A six item list of "common ground" observations concerning the teaching center movement in the U.S. is presented.

Soar, Robert S. "Accountability: Assessment Problems and Possibilities." Journal of Teacher Education, 24 (Fall, 1973), 205-12.

This article discusses the difficulty in evaluating teachers through student progress since tests show a negative correlation for most students. Also under such conditions teachers teach for testing. Testing may be appropriate for low level objectives but for higher levels it would be better to measure teacher behavior relative to behavior known to be related to student achievement. Questions are also raised as to teachers' responsibilities versus those of parents, and who should be accountable for what.

Soanjor, R. Allen. Teacher Preparation: Supervision and Performance. Bethesda, MD: ERIC Document Reproduction Service, ED 073 070, 1972.

This bulletin presents two papers which discuss the concepts of change, modification, and improvement in teaching performance. The first paper suggests some changed roles for supervisory agents in teacher education. The second paper presents several teaching components that could serve as a basis for developing and improving teaching skills.

Soanziat, Richard L. and Courtney, E. Wayne. The Application of Bloom's Cognitive Taxonomy to Selected Professional Education Competencies. Bethesda, MD: ERIC Document Reproduction Service, ED 073 [illegible], 1971.

This presents a study to determine the hierarchial levels of common professional education competencies needed by community

college and secondary school vocational instructors. The major headings of Bloom's cognitive taxonomy were adopted from the survey instrument. Selected vocational instructors from Oregon's community colleges and secondary schools served as the population. Of 99 professional competencies, 57 could be classified as having high levels of correlation and could be grouped into meaningful competency clusters.

Stainback, Susan B. and Stainback, William C. "Competency-Based Teacher Education: A Clarification and Rationale." Teacher Educator, 8 (Spring, 1973), 17-22.

This article attempts to clarify the components of a competency-based teacher training model and to develop a rationale for the implementation of such a model for the training of teachers. The following components of a competency-based model are identified and a discussion of each component is given. They are: 1) determine the competencies needed by teachers to perform their function, 2) evaluate the competencies the prospective teacher already possesses and what competencies need to be developed, 3) determine the most direct process that needs to be followed to develop the student into an effective teacher, and 4) check the finished product for defects, and make sure the prospective teacher has the competencies set in component one.

Starr, Harold. A System for State Evaluation of Vocational Education. Interim Report. Bethesda, MD: ERIC Document Reproduction Service, ED 032 [illegible], 1969.

This document presents information on a model system for conducting vocational education program evaluations developed and field-tested at Ohio State University and in vocational education agencies in Colorado, Kentucky, and New Jersey. The model includes a system for self-initiated and continuous program evaluation, objectives, goals, and data for measuring achievements. Information form examples are included.

State Education Department, Divison of Teacher Education and Certification. "A New Style of Certification." The University of the State of New York, March 15, 1971. (Mimeographed).

This document presents a proposal of a set of process standards to be followed in developing trial projects in teacher education which will lead to a certification that signifies a measure of competence. Process standards is a term used to describe the system to be followed in developing meaningful criteria to be met by prospective teachers. The trial projects are for both initial and continuing certification. The dynamic system will promote accountability, encourage the participation of several agencies to develop criteria and provide for system modification.

Stemnock, Suzanne K. Evaluating Teaching Performance. Educational Research Service Circular Number Three. Bethesda, MD: ERIC Document Reproduction Service, ED 033 448, 1969.

This document describes the method used to gather information from school systems on the procedures used in evaluating the competence of teachers. Data were collected on frequency of evaluation, evaluators, procedures, forms and appraisal procedures. Eight different types of procedures were found to be used by different systems. Copies of thirteen evaluation forms are reproduced.

Strong, William. "A Switchboard Metaphor for Teacher Education." Phi Delta Kappan, 55 (January, 1974), 341-3.

This article describes a pragmatic point of view of teacher education -- dealing with prespecified competence, investigations of self concept and individual personal development. The author suggests a "switchboard scheme" curriculum design in which people of different backgrounds may plug into, share and discuss their common purposes. Ten propositions for the development of such a curriculum are stated.

Student Teaching Cooperative Program. Bethesda, MD: ERIC Document Reproduction Service, ED 074 035, 1971.

This document describes a cooperative-based teacher education program of Castleton State College, Vermont. The team approach is used. Individualization and performance-based education are the objectives. Instruction is given in the following areas: 1) professional courses in the public schools; 2) microteaching and seminars; 3) large group, small group, and individualized instruction; and 4) experience in the integration of subject matter through media and laboratory approaches. Appendixes are included.

Sybouts, Ward. "Performance-Based Teacher Education: Does It Make a Difference?" Phi Delta Kappan, 54 (January, 1973), 303-4.

This article discusses the data compiled from studies of a performance-based program, NUSTEP, for preparing secondary school teachers at the University of Nebraska. It was concluded that the teachers who received performance-based teacher education are more effective than teachers who passed through conventional programs; current students and graduates of NUSTEP have a more positive view of their teacher education curriculum than do students and graduates of conventional programs; also, youngsters taught by the participants in NUSTEP can achieve more.

A Systems Approach to Vocational Teacher Education. Bethesda, MD: ERIC Document Reproduction Service, ED 076 748, 1972.

This document describes the systems project of devising a competency-based system for the preparation of teachers, supervisors, and administrators in the field of vocational and applied arts education. Major activities accomplished the first year included the design, documentation and initial testing of a management information system. Major activities conducted the second year were: 1) the implementation of the pre-certification instructional system, 2) the design of a masters of education program, and 3) continued field testing and maintenance of the management information system.

Thornsley, Jerome R. "Cast Study No. 4 -- Recognition and Respect for Teacher Competency." Thrust for Education Leadership, 2 (November, 1972), 23-7.

This article discusses the Stull Bill in California. The author states that teacher evaluation is needed on the basis of student achievement and teacher performance. A method of conducting the evaluation is presented, together with an example of the evaluation instrument. Criteria for evaluation are tailored and negotiated by the individual teacher so as to eliminate bias caused by factors beyond his control.

Tarr, Elvira R. Some Philosophical Issues in Competency-Based Teacher Education. Bethesda, MD: ERIC Document Reproduction Service, ED 077 857, 1973.

In this paper the author suggests a real CBTE philosophy has not been developed so it is impossible to say it is the solution to teacher education problems. Questions are raised as to the real value of a competency-based program. Major criticisms are lack of distinctions drawn about values of various competencies, lack of concern with affective and cognitive domains, and lack of research showing the relationship between teacher performance and student learning.

Teacher Evaluation Prep - 21. Bethesda, MD: ERIC Document Reproduction Service, ED 044 546, 1971.

This is an interpretive study of practices in "Teacher Evaluation." Teacher evaluation serves several functions both for the teachers and for the educational program. It should be systematic and purposeful with established goals. Teacher evaluation is having great impact on teacher education, especially since the advent of personalized learning.

Thiagarajan, Sivasailan. "Good Objectives and Bad: A Checklist for Behavioral Objectives." Educational Technology, 13 (August, 1973), 25-9.

This article discusses a checklist developed by the author to assist in editing behavioral objectives. An objective is rated on:

1) interrelationship among objectives (subdivided into: (a) sufficiency, (b) necessity, (c) lack of redundancy, (d) lack of triviality, and (e) sequence); 2) extrinsic evaluation (subdivided into: (a) behaviorality, (b) range, (c) aids, (d) standards, and (e) process independence). Each is discussed thoroughly and examples are given.

Terry, David R.; Thompson, Randall L.; and Evans, Rupert N. Competencies for Teachers: Vocational Education Shows the Way. Bethesda, MD: ERIC Document Reproduction Service, ED 067 467, 1972.

This report presents the findings of the first two Illinois Vocational Teachers Competencies Conferences for teacher educators and administrators in vocational education. The goal of the project was to "stimulate continued development of a philosophy toward competency-based teacher education programs, curriculum development based on the current needs of vocational teachers, and policy legislation regarding teacher education and credentialing." Problems in defining teaching competencies and in developing teacher education curriculum which provide teachers with basic competencies are discussed. Appendixes give copies of speeches by consultants related to sources of acquiring, maintaining, improving, and evaluating vocational teacher competencies. Also included is a copy of the validation instrument listing the 477 competencies compiled by the group, followed by a numerical order listing of the competencies.

WAE Pre-Certification Teacher Education Program: Competencies and Performance Objectives. Competency-Based Teacher Education Series, No. 1. Bethesda, MD: ERIC Document Reproduction Service, ED 065 747, 1972.

This booklet lists 75 pre-service teacher competencies and performance objectives for 10 professional pre-service courses developed at Wayne State University, Department of Vocational and Adult Education for the Teacher Education program. Competencies are organized in the following 7 categories: planning instruction, evaluation, guidance, management, public and human relations and professional role. Competencies are general and course-related. Objectives are specific and course-related.

Valecki, Tom. A Continuum Model for Competency-Based Training. The Competency Based Curriculum. Bethesda, MD: ERIC Document Reproduction Service, ED 083 706, 1973.

This paper presents certain aspects which constitute a "total" program in competency-based methodology. These aspects are: competency identification, competency organization, competency analysis, competency units, competency evaluation, and competency feedback. The Rocky Mountain Regional Resource Center and the University of Utah Department of Special Education are jointly developing and testing a competency-based training program to improve

teacher skills in providing remedial services to handicapped children based on the model.

Vocational Education and Self-Evaluation. The Vocational Education Instructor Appraises Product and Process. Bethesda, MD: ERIC Document Reproduction Service, ED 056 177, 1971.

This publication contains guidelines to assist the vocational instructor in self-evaluation. Guideline statements are organized into nine groups covering the range of responsibility/activity of the vocational instructor. The statements are organized into the following sections: 1) groups served by vocational education, 2) the vocational education instructor, 3) curriculum, 4) facilities and equipment, 5) finances and budgets, 6) placement and follow-up, 7) community involvement, 8) related services, and 9) involvement in policy-making in vocational education.

Wall, Charles C. and Williams, Richard C. "Relating Communications Technology to Competency-Based Education." Educational Technology, 12 (November, 1972), 50-2.

In this article the authors discuss the problems of maintaining the existing school systems while designing and implementing the competency-based education system, and producing the vast array of communication devices the learner will need to receive instruction in a variety of settings. Also, attention is given to certain problems to be faced in the future. These were: 1) the production of hardware, 2) the development of technical software, and 3) political problems.

Weber, Wilford A. A Guide to Specifications for a Comprehensive Undergraduate and Inservice Teacher Education Program for Elementary Teachers. Bethesda, MD: ERIC Document Reproduction Service, ED 035 604, 1969.

This paper describes a model for an elementary teacher education program developed at Syracuse University. The model can be adapted for use at various institutions using a wide variety of teacher education techniques. Instructional units are composed of modules and instruction is either individual or in small groups. A thorough account of the various stages of the program is discussed.

Weber, Wilford A. and Cooper, James M. Competency-Based Teacher Education: A Scenario. Bethesda, MD: ERIC Document Reproduction Service, ED 063 273, 1972.

The authors present an idealized CBTE program in dramatic form. The paper explores how the program is established, how it should

ideally perform and presents possible student reactions. The program described completely supplanted the existing program at the mythical university.

Weishahn, Mel W. and Fox, A. M. "Competency-Based Accountability: A Progress Report." Colorado Journal of Educational Research, 12 (Summer, 1973), 3-7.

This report concerns a follow-up study initiated at the School of Special Education and Rehabilitation of the University of Northern Colorado in order to obtain behavioral competency statements of their graduates. The graduates were asked to indicate the necessity of the competency being included in special education curriculum at the University of Northern Colorado, the extent to which each competency was developed, and the degree of proficiency to which the competency was developed at the University. The response for each question was based on a five point scale. Also, the graduates were asked to provide demographic data concerning race, experience, salary, area of service, geography served, age group served, and other related information. The population included all graduates who received either a B.A., M.A., Ed.S., or Ed.D. degree in special education through the years 1961 - 1971. Of the 1,337 graduates, 592 (44%) responded to the questionnaire. No analysis of the data is given.

Weldon, John J. Model: An Authentic Teacher Education Program. Bethesda, MD: ERIC Document Reproduction Service, ED 040 065, 1970.

This document describes the CBTE program model that Mt. Mercy College developed using components of programs researched at other institutions. Minor modifications were made to fit the college needs. A major emphasis is upon early and regular exposure of the student to classroom situations. A two-year follow-up after certification is provided for. Samples are included.

Western Washington State College Clinical Program for Teacher Education in Seattle, Washington. Bethesda, MD: ERIC Document Reproduction Service, ED 046 536, 1971.

This paper presents a brief description of a PBTE program for implementation in Seattle, Washington. Much of the program is to be conducted utilizing personnel from the College and from the public school. Each candidate in the teacher education program is encouraged to study and develop his own teaching style consistent with his own personality. Major criterion for measurement of success is the achievement of the pupils.

White, Louise R. "PBTE in a Multicultural Society." Journal of Teacher Education, 24 (Fall, 1973), 225-31.

This article discusses the problems of training teachers to be effective for our current multicultural society and suggests that PBTE is one of the most promising methods. Five areas of concern are discussed: 1) why multicultural education is a major concern of educators today; 2) the type of teacher needed in a multicultural society; 3) & 4) means of defining competency in a multicultural setting; and 5) how PBTE can be assessed validly as a strategy for teacher preparation. The article discusses the rise of multiculturalism in education, describes the type of teacher needed in this society setting, indicates the promise of PBTE for meeting this need, and discusses research models for evaluating PBTE

Wilson, Richard H. "Performance Criteria for Agricultural Instruction." Agricultural Education, 41 (May, 1969), 261, 263.

This article discusses the need for establishing criteria for selection and for organizing a system of placement of graduates of vocational agriculture education programs due to changes in the types of positions open in this field. The following four levels of ability are discussed: 1) competent performance, 2) capable performance, 3) adequate performance, and 4) acceptable performance.

Wilson, Roger. Teacher Corps. A Model for Training Teachers. Bethesda, MD: ERIC Document Reproduction Service, ED 075 134, 1971.

This paper points out the inadequacies of teacher training programs for teachers who teach in Indian reservation schools and suggests ways of preparing better teachers -- which encourages recruitment of Indian staff, teaching American Indian culture in colleges of education, and recruiting prospective teachers who are native and familiar with the culture. Discussed is the Navajo Teacher Program, where the outstanding feature is competency based teacher education.

Wise, Pauline M.; Sacks, Annabel L.; and Haggerty, Katherine T. A Cooperative Program in Teacher Education. Bethesda, MD: ERIC Document Reproduction Service, ED 075 361, 1971.

This document presents information on an innovative pilot program for preservice elementary school teachers. Students' time was spent in the schools, in seminars, large group activities, and on field trips. Techniques used were team teaching, differentiated staffing, and small group colloquia. Evaluation was frequently.

Woodruff, Asahel D. "PBTE 10 Years Hence." Journal of Teacher Education, 24 (Fall, 1973), 238-43.

This article discusses the effects of past ideas in education on present trends which are resulting in the exploratory movement. Diagrams and tables are used to compare the "Traditional Education Model" with the "Emerging Ability-Developing Model."

education which shifts the role of the teacher from the decision making star to assisting the student in becoming the star and do his own learning.

Weight, Larry (ed.). "University Forum Developing Competency-Based Content in Business, Industry, and Education." Summary Report. Menomonie, Wisconsin: University of Wisconsin, October 17 & 18, 1973. (Mimeographed).

This paper summarizes a conference sponsored by the School of Industry and Technology Department Chairmen and Program Directors Council at Stout. The main topics about competency-based content involved: (1) what is it? (2) who has interest in it? (3) the general, professional implementation, (4) examples of content for implementation, (5) implementing competency-based content, and (6) where do we go from here? Industry and education are represented expressing the necessity of a competency-based program.

Young, Jon I. and Van Mondfrans, Adrian P. "Psychological Implications of Competency-Based Education." Educational Technology, 12 (November, 1972), 15-8.

This article compares conventional educational systems, which dispense knowledge for the average student through the teacher, with the competency-based system, which places more responsibility on the individual student to progress at his own rate of learning using the teacher as a resource person. Factors discussed are interest, motivation, frustration, anxiety and self concept. The authors predict competency-based educational systems can reduce negative psychological effects and increase positive attitudes and learning.

UPDATE

Andrews, Richard L. "How Sound Are the Assumptions of Competency-Based Programs?" Educational Leadership, 31 (January, 1974), 310-2.

This article discusses the assumption made by those in competency-based programs that change in output results from change in process. The article discusses input and how it may change the output. The suggestion is made that if change is not made in input then changing the process will result in the wrong product.

Campbell, David N. "Affective Domain, Too, Has Professional Competencies." Educational Leadership, 31 (January, 1974), 326-8.

This article describes the type of accountability that is most effective — when the teacher is accountable to himself or herself and not to the supervisory staff. A comparison is made of British teachers and teachers in this country. The author indicates the requirements of behavioral objectives, performance-based teacher education and accountability of teachers in our schools is a rigid imposition and an insult to every teacher. This type of program trains our teachers to teach subjects and not individuals. The teacher education program in England trains teachers to deal with individual children and allows teachers to create their own curriculum. "They are trusted to be the best judge of what and how to teach and set their own objectives." How the teacher interacts with students should be the chief concern of the program. The teacher should be highly sensitive to students and react in a nonjudgmental, noncritical and supportive manner.

Cianna, Bartholomew J. Sensitization Locus Model for Teacher Education: A Proposal. Bethesda, MD: ERIC Document Reproduction Service, ED 077 919, 1972.

This is a paper which attempts to answer the questions, "What is effective teaching?", and "How is it produced?" Previous research findings on the subject are examined and the paper proposes a rationale for a program model for teacher education which enables the student to evaluate his own goals, values, assests, and capabilities in both an intellectual and effective mode. Emphasis is placed on PBE in internship and in-field programs. A "Sensitization Locus Conceptual Model" chart and a 23 item bibliography are included.

Competency-Based Teacher Education. Bethesda, MD: ERIC Document Reproduction Service, ED 076 518, 1972.

This report provides information concerning a competency-based program at Madonna College based on the systems approach to learning. Each term, students in education contract with a teacher to develop a competency. Experiences are provided for the student to develop that competency. In the report, competencies are listed with activities to develop the competencies and performance criteria to be used in evaluating to determine if the student has obtained the competency.

Connell, William A. "Professional Associations Play a Part in the Competency Movement." Educational Leadership, 31 (January, 1974), 290-4.

This article discusses the part played by professional associations such as the NEA, AACTE, and NASDTEC on the competency movement. Most associations view the current competency movement as a possible experimental model, and an approach that all teacher education programs do not have to follow. The role of the professional associations in the movement are identified as recognition of the association as the representative of the practicing teacher in any arena that affects the teacher, support to support experimentation in teacher education such as competency based programs, but to resist using an unproven model of teacher education as the basis of all teacher preparation and using the method as a means of evaluating teachers.

Townsend, William H. "Does PBTE Mean Reform?" Educational Leadership, 31 (January, 1974), 291-3.

This editorial discusses the key issues of PBTE. These concern the problem areas of (a) the application of systems technology to teacher education, and (b) power sharing. The article states the editorial opinion that the major controversies relate to power sharing. He states, "What is needed is a process for systematic change -- a way to use tested experience to change both the direction and operational characteristic of the system." The article suggests that PBTE can provide this process.

Faherty, Mary Lou. Teacher Corps/Peace Corps Competency-Based Elementary Physical Education Project. Bethesda, MD: ERIC Document Reproduction Service, ED 086 671, 1973.

This document describes the Washington State University Teacher Corps/Peace Corps project in elementary school physical education. It was a graduate program and was competency-based, field-based, and partially individualized. The program was twelve months in length and included three phases: 1) pre-service -- theory and application for teaching, subject matter and community needs, 2) in-service -- including teaching experience and courses in teaching, curriculum, learning, development, and methods of

research; and 3) post-service -- including thesis proposal approval, and additional courses in administration supervision and conducting in-service programs for classroom teachers. Appendices include sample pages of standards, competency facilitating objectives, and evaluation instruments.

Foster, Clifford D. "Analyzing the PBTE Approach." Educational Leadership, 31 (January, 1974), 306-9.

The article discusses the lack of progress made in teacher education. Three events are cited that have contributed to the [illegible]ement: (1) the 1967 USOE call for proposals for improving elementary education; (2) the 1970 criteria standards adopted by the National Council for Accreditation of Teacher Education [illegible] and (3) the gaining momentum in several states for [illegible]roach to teacher certification. PBTE assumptions about education include: (1) what is the basic role of the [illegible] what then is the criteria, (2) what are the desirable [illegible] instruction, and (3) what should be included in the [illegible] for teacher education.

Gagnon, A. Lawrence. "How Can Community, Students, and Parents Assess Competency?" Educational Leadership, 31 (January, 1974), 345-47.

This article stresses the need of teamwork between teachers and parents in order to create a climate with motivation for learning. The author proposes that students respect the right of parents and teachers to make decisions --- the student's success or failure in school cannot be altogether attributed to his teacher or principal --- family characteristics have the greatest influence on the student learning. Suggestions are offered as to how the community, parents and students can assist educators to improve the instructional program of students: 1) developing a desirable climate, 2) providing funds for operating an individualized instructional program, 3) constructing adequate building facilities, 4) providing time for teachers and administrators to develop an individualized curriculum, and 5) sharing experiences by which [illegible] evaluation policies can be implemented.

Governors State University Urban Teacher Education Program. Bethesda, [illegible] ERIC Document Reproduction Service, ED 076 517, 1972.

This report describes a competency-based teacher education program designed to prepare teachers for urban schools. The program [illegible] uses learning modules, learning teams, and teacher education [illegible] located in an urban area. Students are involved directly with the working environment.

Grover, Burton L. and others. A Comparative Multivariate Analysis of Competency-Based Teacher Education Programs. Final Report. [illegible] ERIC Document Reproduction Service, ED 071 [illegible].

This research project conducted at Western Washington State College took advantage of the opportunity of having seven teacher education programs operating simultaneously at the same institution to cope with problems of evaluating teacher education programs. Three categories of variables were selected with a large number of sub-variables under each. These general variables were: 1) energy characteristics, 2) program and setting characteristics, and 3) teaching and exit characteristics. A series of factor analyzes of selected subsets of variables did not reveal any factor which accounted for more than ten percent of teaching variables among programs revealed two significant functions, while an analysis of entry characteristics revealed three significant functions. This project demonstrated that a multivariate analysis of different teacher education programs was difficult to handle but could very well discern useful patterns and relationships in teacher education. A number of recommendations were made to assist those who wish to apply multivariate analysis to the study of teacher education.

Henson, Kenneth T. An Approach to Performance-Based Teacher Education. Bethesda, MD: ERIC Document Reproduction Service, ED 076 506, 1971.

This document presents an experiment with accountability in the methods and media courses at Indiana State University. The project was divided into four phases: 1) course introduction -- discussed ideas of developing an informal personal atmosphere, identification of teaching skills, developing awareness in concept analysis, and planning lessons, formulating a class structure for micro-teaching and formulating a class system for critiquing lessons; 2) peer teaching -- emphasized achieving an attitude change, employing teaching skills and employing A.V. skills; 3) non-teaching skills -- pursued skills in leading discussion, constructing, administering, and scoring teacher made tests, and keeping attendance records; 4) non-teaching majors -- emphasized competences which are specifically meaningful to the non-teaching major.

Kemmis, Stephen and Stake, Robert E. "Operational vs. Judgmental Assessment of Teacher Competencies." Educational Leadership, 31 (January, 1974), 322-5.

The authors argue that the operational view -- establishing behavioral criteria for observing and assessing teacher competence -- leads to both impractical and harmful practices. They advocate a judgmental view which follows the more traditional pattern of teacher education and calls for coordinated assessment by professors, teachers, administrators, citizens and students. Several references are cited in opposition to operational assessment -- the main objection being the imposition of rules and assessments of standards decided by outside experts rather than teachers themselves.

Lawrence, Gordon. "Delineating and Measuring Professional Competencies." Educational Leadership, 31 (January, 1974), 298-302.

The article gives three criteria that deal with the fundamentals of the competency approach to teacher education. These include (1) competencies having a rationale or conceptual base; (2) competencies stated for explicit assessment; and (3) competencies being the "legal tender" for a teaching position. The article states that competency objectives are not clearly rooted in theory and research. Two hundred modules were analyzed and were found lacking in procedure and performance criteria. The article suggests that rather than our traditional college transcript the ideal record would present a clear picture of each teacher's specific and unique set of capabilities.

Lougheed, Jacqueline I. Competency-Based Education Development Project Final Report. Bethesda, MD: ERIC Document Reproduction Service, ED 061 179, 1971.

This report of a competency-based project at Oakland University for instructing teacher corps interns reflects a favorable rating by the students and the staff members. Traditional programs received lower ratings. The appendix contains the response form and observation sheet used during the study. Also given is a prospectus for a modular competency-based program for presenting literature to children.

McCleary, Lloyd E. Competency-Based Educational Administration and Application to Related Fields. Bethesda, MD: ERIC Document Reproduction Service, ED 077 136, 1973.

This paper attempts to define competence and then presents a flow-chart indicating how competence may be attained in educational administration. In the model presented technical, conceptual and human knowledge skills are included in the molar form. The article indicates that unless competencies are defined there is no way to insure their development.

McMillion, Martin B. A Comparison of Anxiety Levels of Student Teachers Prior to Student Teaching Under Performance-Based and Other Types of Instruction. Bethesda, MD: ERIC Document Reproduction Service, ED 085 044, 1973.

This is a research study of the problem to determine the difference in the degree of pleasantness of student teachers prior to teaching experiences who were prepared by traditional methods versus student teachers prepared by performance-based instruction. Objectives of the study were to determine if the student-teachers who were prepared by performance-based instruction felt both prior to and after their student teaching experience that the concept of "student teaching" was more pleasant than that of the student

teachers who were prepared by two more traditional methods, and to determine whether or not the concept changed significantly during the student teaching experience. Findings included: 1) the group trained by performance-based instruction viewed the concept with less pleasantness prior to student teaching experience than the other two groups but showed a larger increase in pleasantness during the experience. All groups were equally motivated to complete the project. Descriptions of the performance-based instruction program the instrument used, method of data analysis, and copies of tables are given. Copies of questionnaires with instructions are included in the appendices.

Morgan, William C. "Competency-Based Modules for In-Service Education." National Leadership Research Supplement, 31 (January, 1974).

This report summarizes the findings of a research study conducted in Anne Arundel County, Baltimore, Maryland, using junior high and high school social studies teachers. The study sought to determine the effectiveness of two self-instructional modules in aiding in-service teachers improve their professional competency and to determine the attitudes of the classroom teachers toward the use of SIM's as an alternate in-service [illegible]. From the population of 32 teachers with a mean teaching experience of 6.7 years, the study produced empirical evidence to support the hypothesis concerning the utilization of [illegible] to improve the quality of in-service education programs and [illegible] of teaching performance.

[illegible]. A Three-Part, Flexible, Individualized Teacher Education Program. Bethesda, MD: ERIC Document Reproduction Service, ED 089 359, 1973.

This document describes the efforts of the Minnesota University [illegible] in cooperation of the public and private elementary and secondary schools of northeastern Minnesota to develop a three-part, flexible, individualized teacher-education program which integrates pre-service and in-service stages and replaces the present teacher-education program. The program is divided into three parts: 1) secondary teacher education program which is a competency based, individualized program providing [illegible] classroom experiences, individualized learning [illegible], assessing and monitoring, and a variety of teaching [illegible] a new master of education degree -- this program also [illegible] degree; and 3) summer school courses to meet the needs of [illegible] student teachers.

[illegible]. Implementation of a Competency-Based Teacher Education [illegible]. Progress Report, Volume I. Bethesda, MD: ERIC Document Reproduction Service, ED 089 057, 1973.

This project outlines the procedures involved in making the transition from traditional instructional programs in teacher education to programs which are competency-based at Jackson State College. The faculty and students involved with the Jackson State College - Hinds County Teacher Corps Program were involved in the experimental project. Students were given eight courses in early childhood -- totally or in part competency-based and assigned to six hours of internship. Student evaluations indicated: 1) a positive regard for competency based instruction, 2) a feeling that they were under less pressure, and 3) an opinion that they would achieve more and would receive higher grades. Faculty members also reacted positively to competency-based instruction indicating that they would use the method in their own classes and that the end product of such a system would be better prepared. It was recommended that all of the faculty members in teacher education be involved in competency-based education in an effort to implement further competency-based instruction at Jackson State College.

Newman, Sally. "A Report on Some Open Education Competencies." Journal of Teacher Education, 25 (January, 1974), 175-9.

The article identifies 22 teacher competencies associated with working in a classroom and describes the process used to assess the mastery of some of the competencies. The competencies involved those necessary for appropriate curriculum development, interpersonal relationships, and teaching devices for successful classroom operation. The assessment of the development of competencies involved student self-assessment of perceived growth, peer observation, and instructor verification of student's perceptions. A competency-development wheel based on Bloom and Krathwohl cognitive and affective behavioral hierarchies was used to develop and assess the competencies.

O'Hanlon, James. "The Case for Professional Competencies." Educational Leadership, 31 (January, 1974), 355-7.

The author of this article briefly reflects on the performance competency movement and its effects on teacher education in the past. Three positive results of the performance competency movement are discussed. The programs are identified as: 1) an increase in curriculum integration; 2) a rethinking of certification requirements and procedures; and 3) in-service growth experiences of the teacher educator himself. The author expresses concern for the continuing one-to-one stage of the movement and whether or not it will survive. In order that the movement will not fail, new forms of self-renewal are needed. Several questions are presented which may be important as a basis for further refinement of the performance competency model.

Reed, Elizabeth C. Development of a Competency-Based Teacher Education Program at Tennessee State University, Final Report. Bethesda, MD: ERIC Document Reproduction Service, ED 065 485, 1971.

This report reviews the accomplishments of the CBTE program at Tennessee State University from September 15, 1971, to December 17, 1971. A report on the implementation of the recommendations of the Feasibility Report of 1970 is given. Also, reports of the Self-Directed, Liberal Arts, Teaching Theory and Practice Components and the Evaluation Committee are presented, each emphasizing three aspects of the component -- goals, implementation, problems, and projections. Based on an evaluation of the organizational structure of the program, the following ten recommendations were given -- commitment, proficiency in skills, stronger incentives, model behavior, establishing and maintaining subsystems, purchasing materials necessary to accomplish the aims of the program, communication channels, clerical assistance, consultative personnel, the addition of the Director of the University Computer Center on the program steering committee. Appendices are included.

Schalock, H. D. "Impact of Competency Definition on Teacher Preparation," Educational Leadership, 31 (January, 1974), 319-21.

This article discusses the different views of how competency-based teacher education (CBTE) may be defined and the influence that definition on the way CBTE will be designed. Three kinds of evidence to be used as a predictor of teaching competency are discussed: 1) mastery of knowledge related to teaching, 2) demonstration of appropriate teaching strategies, and 3) evidence of competency in terms of outcomes accomplished in a special teaching situation. The author contends that the choice of definition for assessing competency is the most important decision the designer of CBTE can make because of its implications for assessment, program governance, certification and improving the quality of teaching.

Schalock, H. Del and Hale, James R. A Competency-Based, Field-Centered Systems Approach to Elementary Teacher Education, Volume V: Comfield Specifications. Final Report. Bethesda, MD: ERIC Document Reproduction Service, ED 026 305, 1968.

This document describes the development of the Comfield Competency-Based, Field-centered model of elementary teacher education which includes specifications for instruction and management of the preservice program including: 1) entry behaviors, 2) instructional competencies, 3) non-instructional competencies, 4) personalizing competencies, and 5) the personalization of program competencies. Part 2 details specifications for managing the program including explanation of the management system, instruction, policy, adaptation, program execution, facilities, personnel, research and development costing, information

transmission, and evaluation. A related document, ED 018 677.
factors in implementing a Comfield based program
commitment resources, adaptability, and time.

Allen A. Competency-Based Education: The State of the
Bethesda, MD: ERIC Document Reproduction Service,
, 1973.

document gives a detailed outline of the CBE movement in
United States. Given is an introduction to CPE, distinguishing
characteristics; degree participation by states, higher education,
administrators, and community; current resources; a
of publications; major issues; and a CBE glossary.
the profile of progress is included.

el P. Performance-Based Teacher Education and the
Better Fields. PBTE Series No. 11. Bethesda, MD: ERIC
Reproduction Service, ED 077 890, 1973.

discusses the attributes of performance-based teacher
how it may offer valuable alternatives to current
requirements, course offerings, and credit and grading
many undergraduate departments in the arts and sciences.
bibliography is included, along with a discussion of the
Center Project, the AACTE, and a list of the AACTE
Based Teacher Education Project Committee members and
order forms for recent AACTE publications are
presented.

: A Competency-Based Teacher Education Program. Bethesda,
Document Reproduction Service, ED 075 431, 1972.

a report of project "Turn About" which was initiated at
Washington State College and Everett Public Schools in
State. The major objectives of the program were to
the learning outcomes of elementary school children and
competency based undergraduate and graduate teacher
a partial school." Five clinical professors and
were program leaders. They were responsible for
assigned elementary children and 58 full-time graduate
graduate students. Undergraduates were assigned to the
these academic credits and graduates were given
professional leave, and candidates for the
degree. An evaluation of the program
graduate and undergraduate course

Helen G. "Competency-Based Certification: A New
Phi Delta Kappan, 31 (January, 1974), 348-9.

This brief article reports on the current status of each of the fifty states in their move toward or involvement in competency-based teacher education programs. A three-response item questionnaire was sent to each state. It was reported that eight states were using some form of competency-based certification requirements. Twenty-two states indicated that they were planning to go to competency-based requirements for certification and twenty states reported that there were no plans for having competency-based requirements. A complete list of the category that each state (by name) falls under is given.

Weber, Wilford A. The Competency-Based Teacher Education Development Projects, Volume I and II. Final Report. Bethesda, MD: ERIC Document Reproduction Service, ED 059 986, 1971, 270.

The purposes of this project were to facilitate, coordinate, monitor, and evaluate the activities of seven fifth cycle teacher corps programs involved in implementing competency-based teacher education programs based on the National Center for Educational Research and Development teacher education models. The document is divided into two volumes. Volume I presents a fictitious interview which describes the thoughts of representatives from the seven fifth cycle teacher corps projects as they implemented competency based teacher education programs. The second volume, consisting of twelve sections, provides information supporting the ideas presented in the first volume. Some of the conclusions reported were: 1) development and implementation processes were slower and difficult, 2) lack of time and money was a very serious problem, 3) progress was substantial when viewed in light of the expectations despite numerous problems, and 4) trainees developed more positive feelings toward competency based teacher education aspects of their programs which were competency based, than toward the total program than they did toward the traditional approach to teacher education.

Western Carolina University. Personalized Instruction Through Competency-Based Teacher Education. Bethesda, MD: ERIC Document Reproduction Service, ED 086 651, 1973.

This document gives a detailed report of a pilot educational program developed at Western Carolina University to individualize instruction for both prospective teachers and public school students in selected schools located in rural mountain school districts. Instruction and demonstration of competencies is provided for students as the student participate in the competency-based teacher education program. Needs of students and teachers are identified and learning activities are initiated. Included in the document are bibliographies and other resources from the Southeastern Regional Consortium on competency-based teacher education.

Williams, C. Ray and Jensen, Julie M. "Toward an Operationally Defined Curriculum." Educational Leadership, 31 (January, 1974), [illegible].

This article stresses the value of designing teacher education curricula that proceeds from long-range goals to teacher behaviors and preservice tasks. The authors imply that too often goals are stated, but the teacher does not express these goals into specific classroom behaviors. Teacher education programs have the responsibility of enabling their graduates to translate instructional goals into practice. An example of a process for this translation is presented. Five long-range goals including the teacher behaviors and preservice tasks of each are given. Goals described are: 1) teachers who accept and encourage creative or unusual behavior in children, 2) teachers who communicate effectively with pupils, 3) teachers who identify the strengths and weaknesses of the individual student and utilizing this knowledge in teaching, 4) teachers who understand and respect the cultural heritage, and 5) teachers who stimulate pupils to take active part in shaping the learning environment.

[illegible] and Gross, Bernard. A Procedure for Development of Competency Based Performance Statements and Module Development for Inservice and Preservice Education. [illegible] Reproduction Service, ED 064 [illegible], 1972.

This report presents developmental procedures for use in developing competency-based, student teacher/inservice programs. The procedures are based on the effort to redesign the St[illegible] College Teacher Education Program to include behavioral objectives. The five steps used in providing these objectives were: 1) identifying a goal, 2) setting down performance statements of what is to be done to define the goal, 3) identifying true performance statements, 4) describing each performance statement in terms of performance, knowledge, product, affective, and exploratory, and 5) modifying these statements to ensure the attainment of the goal. Based on the behavioral goals, modules were developed having the following characteristics: a) [illegible] the focus of the program, b) objectives should be stated, c) diagnostic and instructional materials and techniques should be provided, and d) the package should be self-contained. Appendices include information on [illegible] performance statement identification, [illegible] of performance statements, and a program [illegible] module development.